CMT-GPX6/GPX7

SERVICE MANUAL

Ver 1.0 2004.04

US Model
Australian Model
CMT-GPX6
AEP Model
CMT-GPX7
E Model
CMT-GPX6/GPX7

- CMT-GPX6/GPX7 are composed of the following models.
  As service manuals are issued for each component model, please refer to them.

COMPONENT MODEL NAME

	CMT-GPX6	CMT-GPX7
COMPACT DISC DECK RECEIVER	HCD-GPX6	HCD-GPX7
SPEAKER SYSTEM	SS-CGPX6	SS-CGPX7

SPECIFICATIONS

Power requirements
North American model: 120 V AC, 60 Hz
European model: 230 V AC, 50/60 Hz
Korean model: 220 V AC, 60 Hz
Argentina model: 220 V AC, 50 Hz
Australian model: 230 – 240 V AC, 50/60 Hz
Other models: 110 – 120 V or 220 – 240 V AC, 50/60 Hz
Adjustable with voltage selector

Power consumption
CMT-GPX7: 105 W
0.25 W (in Power Saving Mode)
CMT-GPX6: 80 W

Dimensions (w/h/d) Approx. 181.5 × 261.5 × 357.5 mm incl. projecting parts and controls

Mass
CMT-GPX7: Approx. 6.3 kg
CMT-GPX6: Approx. 5.8 kg

Supplied accessories Remote Commander (1)
R6 (size AA) batteries (2)
AM loop antenna (1)
FM lead antenna (1)

Design and specifications are subject to change without notice.

ACCESSORIES

Part No.	Description	Remark
1-478-518-11	COMMANDER, STANDARD (RM-SC3)	
1-754-102-31	ANTENNA, ROOP (LW.MW)	
1-754-243-11	ANTENNA (FM)	
4-253-903-12	MANUAL, INSTRUCTION (ENGLISH) (US, SP, HK, AUS, AEP, AR)	
4-253-903-21	MANUAL, INSTRUCTION (FRENCH, SPANISH) (SP, AEP, AR)	
4-253-903-31	MANUAL, INSTRUCTION (GERMAN, DUTCH, ITALIAN) (AEP)	
4-253-903-41	MANUAL, INSTRUCTION (SWEDISH, POLISH) (AEP)	
4-253-903-51	MANUAL, INSTRUCTION (TRADITIONAL CHINESE) (SP, HK)	
4-253-903-61	MANUAL, INSTRUCTION (KOREAN) (KR)	
4-253-903-71	MANUAL, INSTRUCTION (ARABIC) (SP)	
4-253-904-11	MANUAL, INSTRUCTION (DANISH, FINNISH) (AEP)	
4-253-904-21	MANUAL, INSTRUCTION (PORTUGUESE) (AEP)	
4-253-904-31	MANUAL, INSTRUCTION (RUSSIAN) (AEP)	
4-253-904-41	MANUAL, INSTRUCTION (GREEK) (AEP)	
4-253-904-51	MANUAL, INSTRUCTION (HUNGARIAN, CZECH) (AEP)	
4-253-904-61	MANUAL, INSTRUCTION (SLOVAKIAN) (AEP)	
4-253-904-71	MANUAL, INSTRUCTION (TURKISH) (AEP)	

•Abbreviation
AR : Argentina model
AUS : Australian model
HK : Hong Kong model
KR : Korean model
SP : Singapore model

MICRO Hi-Fi COMPONENT SYSTEM

9-877-741-01 **Sony Corporation**
2004D05-1 **Home Audio Company**
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Published by Sony Engineering Corporation

SONY®

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2004.04	New

HCD-GPX6/GPX7

SERVICE MANUAL

Ver 1.0 2004.04

Photo: HCD-GPX7

US Model
Australian Model
HCD-GPX6
AEP Model
HCD-GPX7
E Model
HCD-GPX6/GPX7

HCD-GPX6/GPX7 are the amplifier, CD player, tape deck and tuner section in CMT-GPX6/GPX7.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	CDM80B-F1BD81
	Base Unit Name	BU-F1BD81A
	Optical Pick-up Block Name	KSM-215DCP
Tape deck Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	CMAL1Z234A

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION: (The United States model only)

With 6 ohm loads, both channels driven, from 120-10,000 Hz; rated 35 watts per channel minimum RMS power, with no more than 10% total harmonic dist ortion from 250 milliwatts to rated output.

Amplifier section

HCD-GPX7

DIN power output (rated): 40 + 40 W (6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference): 60 + 60 W
(6 ohms at 1 kHz, 10% THD)
Music power output (reference): 100 + 100 W

HCD-GPX6

North American model:
Continuous RMS power output (reference): 40 + 40 W
(6 ohms at 1 kHz, 10% THD)
Other models:
The following measured at AC 240 V, AC 220 V or AC 120 V
DIN power output (rated): 30 + 30 W (6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference): 35 + 35 W
(6 ohms at 1 kHz, 10% THD)

Inputs
MD/VIDEO: Sensitivity 450/250 mV, impedance 47 kilohms

Outputs
PHONES: Accepts headphones with an impedance of 8 ohms or more
SPEAKER: Accepts impedance of 6 to 16 ohms.

CD player section

Laser: Semiconductor laser (λ=780 nm)
Emission duration: continuous
Frequency response: 20 Hz – 20 kHz
Wavelength: 780 – 790 nm

Tape deck section

Recording system: 4-track 2-channel, stereo
Frequency response: 50 – 13,000 Hz (±3 dB), using Sony TYPE I cassettes

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range: 87.5 – 108.0 MHz
Antenna: FM lead antenna
Antenna terminals: 75 ohms unbalanced
Intermediate frequency: 10.7 MHz

AM tuner section

Tuning range
Pan-American model: 530 – 1,710 kHz
(with the tuning interval set at 10 kHz)
531 – 1,710 kHz
(with the tuning interval set at 9 kHz)
European model: 531 – 1,602 kHz
(with the tuning interval set at 9 kHz)
Other models: 530 – 1,710 kHz
(with the tuning interval set at 10 kHz)
531 – 1,602 kHz
(with the tuning interval set at 9 kHz)
Antenna: AM loop antenna, external antenna terminal
Intermediate frequency: 450 kHz

General

Power requirements
North American model: 120 V AC, 60 Hz
European model: 230 V AC, 50/60 Hz
Argentina model: 220 V AC, 50 Hz
Korean model: 220 V AC, 60 Hz
Australian model: 230 – 240 V AC, 50/60 Hz
Other models: 110 – 120 V or 220 – 240 V AC, 50/60 Hz
Adjustable with voltage

Power consumption
HCD-GPX7: 105 W
0.25 W (in Power Saving Mode)
HCD-GPX6: 80 W
Dimensions (w/h/d): Approx. 181.5 × 261.5 × 357.5 mm incl. projecting parts and controls

Mass
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HCD-GPX6: Approx. 5.8 kg

Design and specifications are subject to change without notice.

COMPACT DISC DECK RECEIVER

9-877-742-01
2004D05-1
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Sony Corporation
Home Audio Company
Published by Sony Engineering Corporation

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SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage.
Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

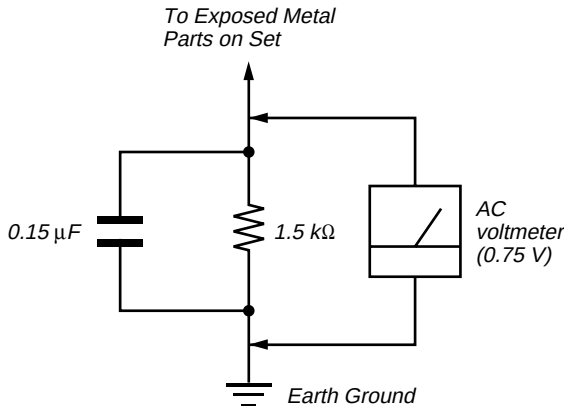

Fig. A. Using an AC voltmeter to check AC leakage.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

DANGER	DANGER
INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. AVOID DIRECT EXPOSURE TO BEAM.	RADIATION DE LESER INVISIBLE LORS D’OUVERTURE. AVEC L’ENCLENCHEMENT DE SECURITE ANNULE. EVITER L’EXPOSITION DIRECTE .AU RAYON.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscou-s (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

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SECTION 1
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

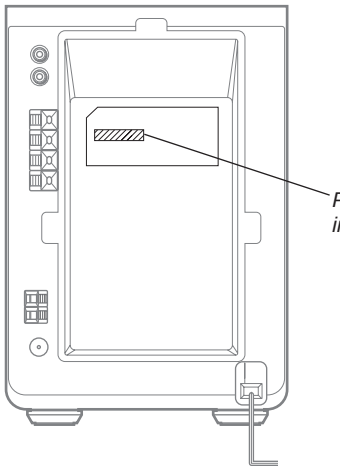
NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

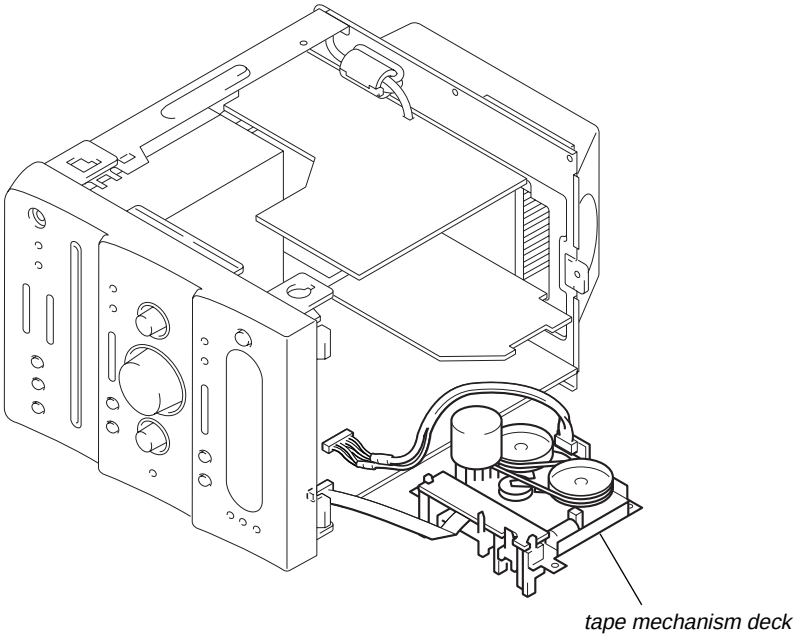
Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveforms is output three times.

• MODEL IDENTIFICATION
– Rear View –

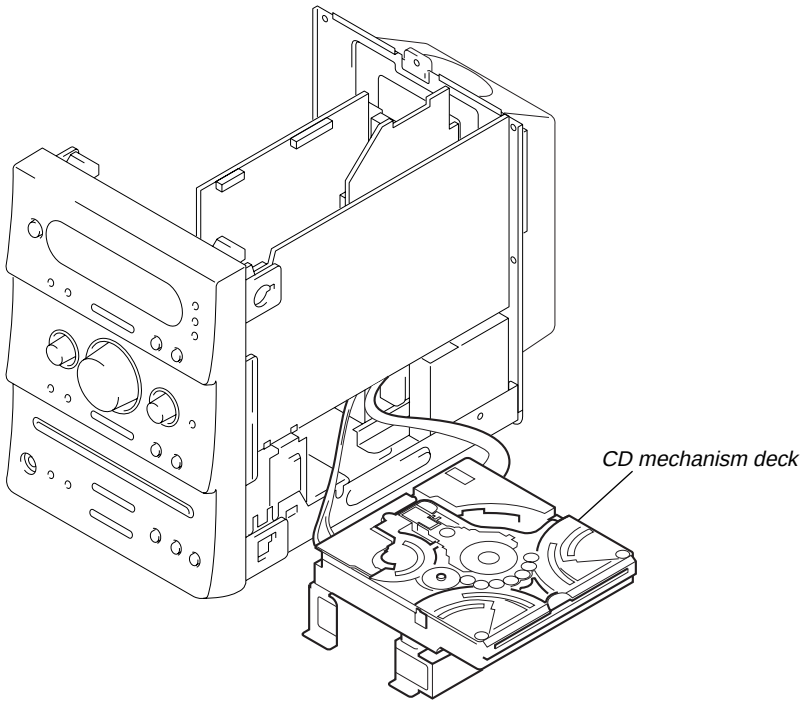


MODEL	Power requirement indication
US model	AC: 120V 60Hz
AEP model	AC: 230V ∿ 50/60Hz
Hong Kong, Singapore models	AC: 120V/220V/230-240V ∿ 50/60Hz
Argentina model	AC: 220V ∿ 50Hz
Korean model	AC: 220V ∿ 60Hz
Australian model	AC: 230V-240V ∿ 50/60Hz

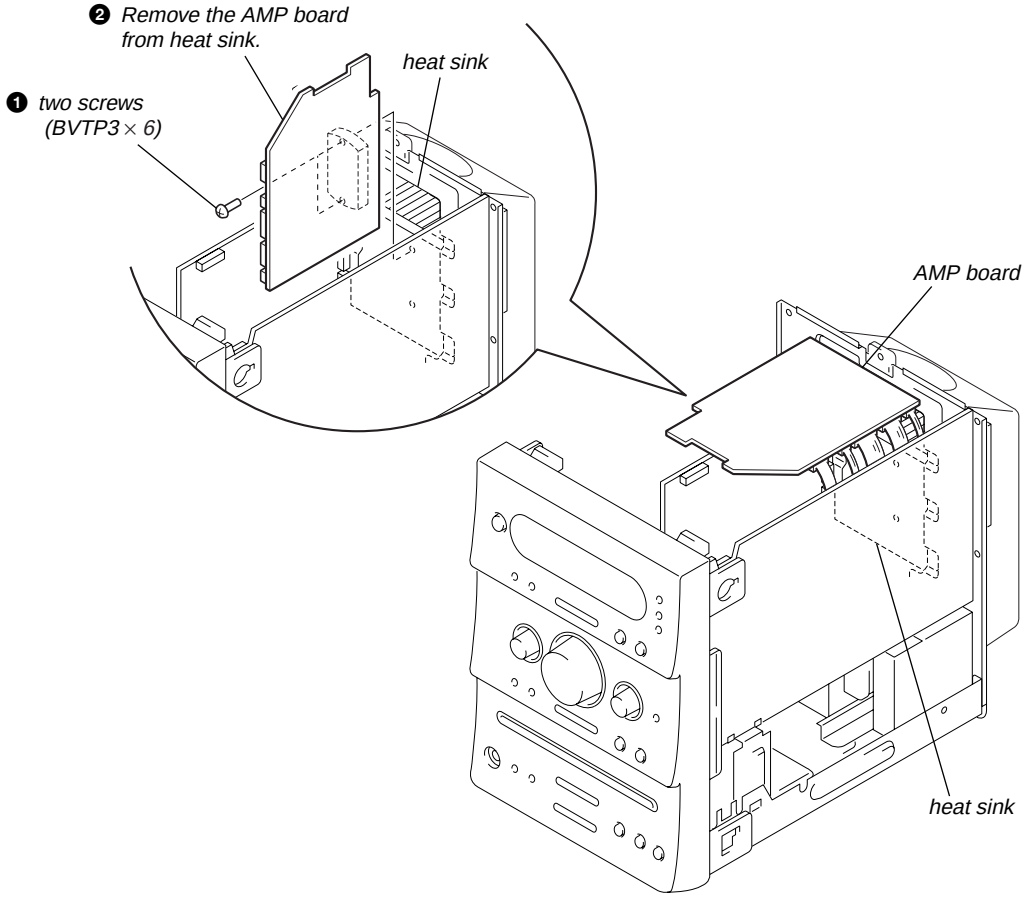
SERVICE POSITION
– TAPE MECHANISM DECK –



– CD MECHANISM DECK –



– AMP BOARD –



SECTION 2
GENERAL

This section is extracted from instruction manual.

• LOCATION OF CONTROLS

Main unit

ALPHABETICAL ORDER

A – O

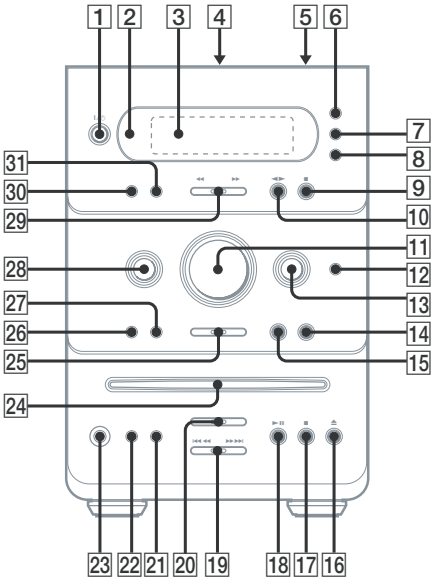
ALBUM +/– 20
BASS +/– 28
Cassette compartment 4
CD SYNCHRO 7
DIRECTION 6
Disc slot 24
DISPLAY 31
Display window 3
DSGX 12
FM MODE 26
FUNCTION 30

P – Z

PHONES jack 23
PLAY MODE 22
Remote sensor 2
REPEAT 21
TREBLE +/– 13
TUNER/BAND 15
TUNER MEMORY 27
TUNING +/– 25
TUNING MODE 14
VOLUME 11

BUTTON DESCRIPTIONS

I/⏻ (power) 1
⏮◀◀/▶▶⏭ (CD skip back/skip forward, CD rewind/fast forward) 19
◀◀/▶▶ (tape rewind/fast forward) 29
■ (CD stop) 17
■ (tape stop) 9
● REC PAUSE/START 8
CD/►II (play/pause) 18
TAPE/◄► (play) 10
⏏ (CD eject) 16
⏏ PUSH EJECT (tape open/close) 5



Remote control

ALPHABETICAL ORDER

A – O

ALBUM +/– 11
CD 16
CLEAR 13
CLOCK/TIMER SELECT 2
CLOCK/TIMER SET 3
DISPLAY 19
ENTER 9
EQ 12
FM MODE 4
FUNCTION 6

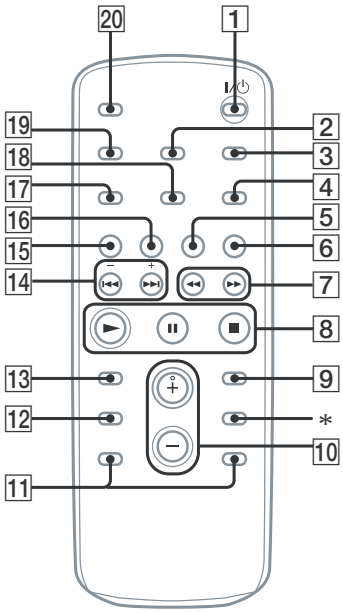
P – Z

PLAY MODE 18
REPEAT 4
SLEEP 20
TAPE 15
TUNER/BAND 5
TUNER MEMORY 17
TUNING MODE 18
VOLUME +/– 10

BUTTON DESCRIPTIONS

I/⏻ (power) 1
◀◀/▶▶ (rewind/fast forward) 7
I◀◀ /▶▶I (skip back/skip forward) 14
■ (stop) 8
❚❚ (pause) 8
► (play) 8
+/– (tuning) 14

CMT-GPX7/CMT-GPX6



* This button is not available for this model.

Setting the clock

Use buttons on the remote for the operation.

1 Press I/⏻ to turn on the system.

2 Press CLOCK/TIMER SET.

3 Press I◀◀ /▶▶I repeatedly to set the hour.

4 Press ENTER.

5 Press I◀◀ /▶▶I repeatedly to set the minute.

6 Press ENTER.

The clock starts working.

To adjust the clock

1 Press CLOCK/TIMER SET.

2 Press I◀◀ /▶▶I until “CLOCK SET” appears, then press ENTER.

3 Do the same procedures as step 3 to 6 above.

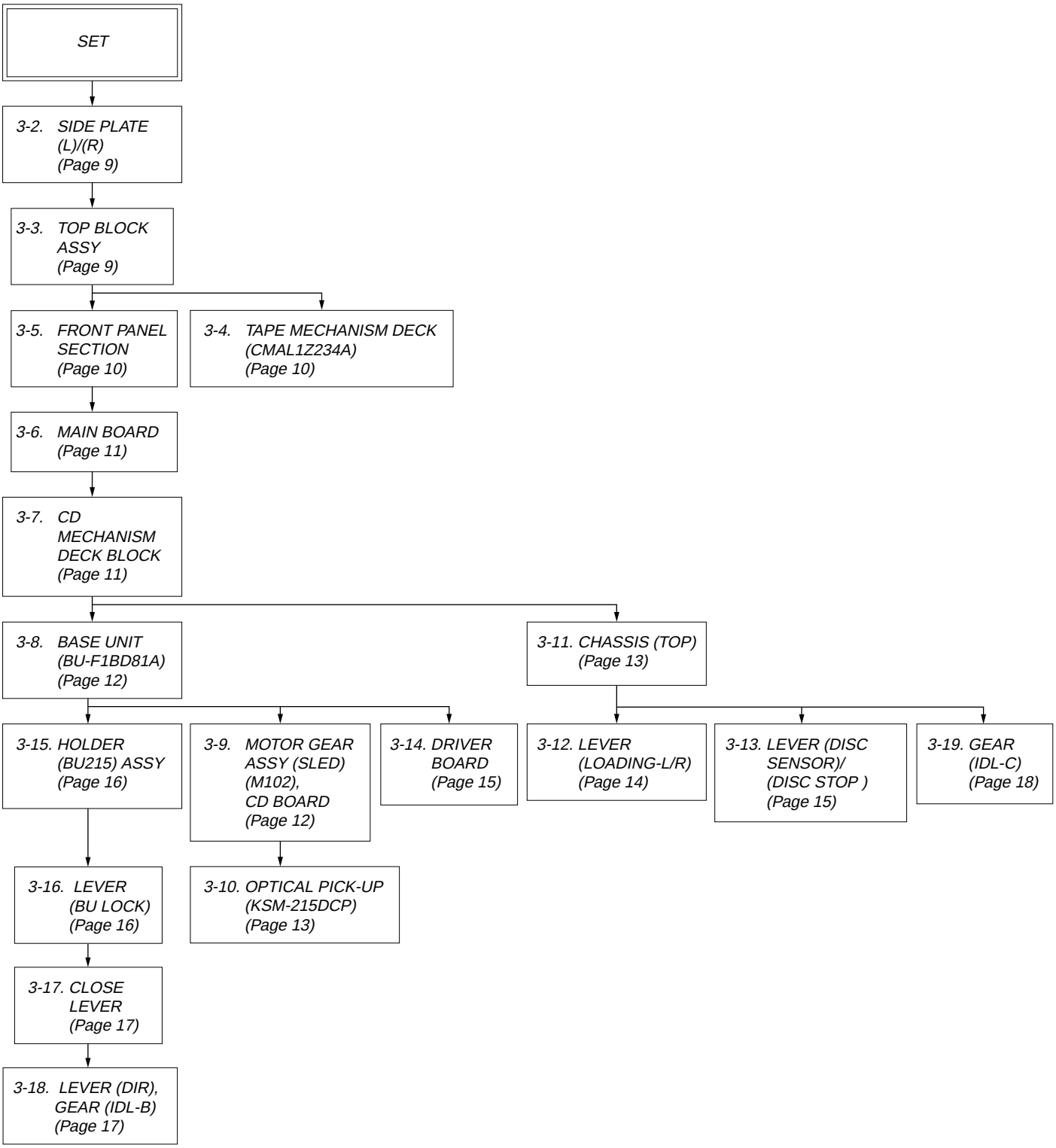
Note

The clock is not displayed in Power Saving Mode.

SECTION 3
DISASSEMBLY

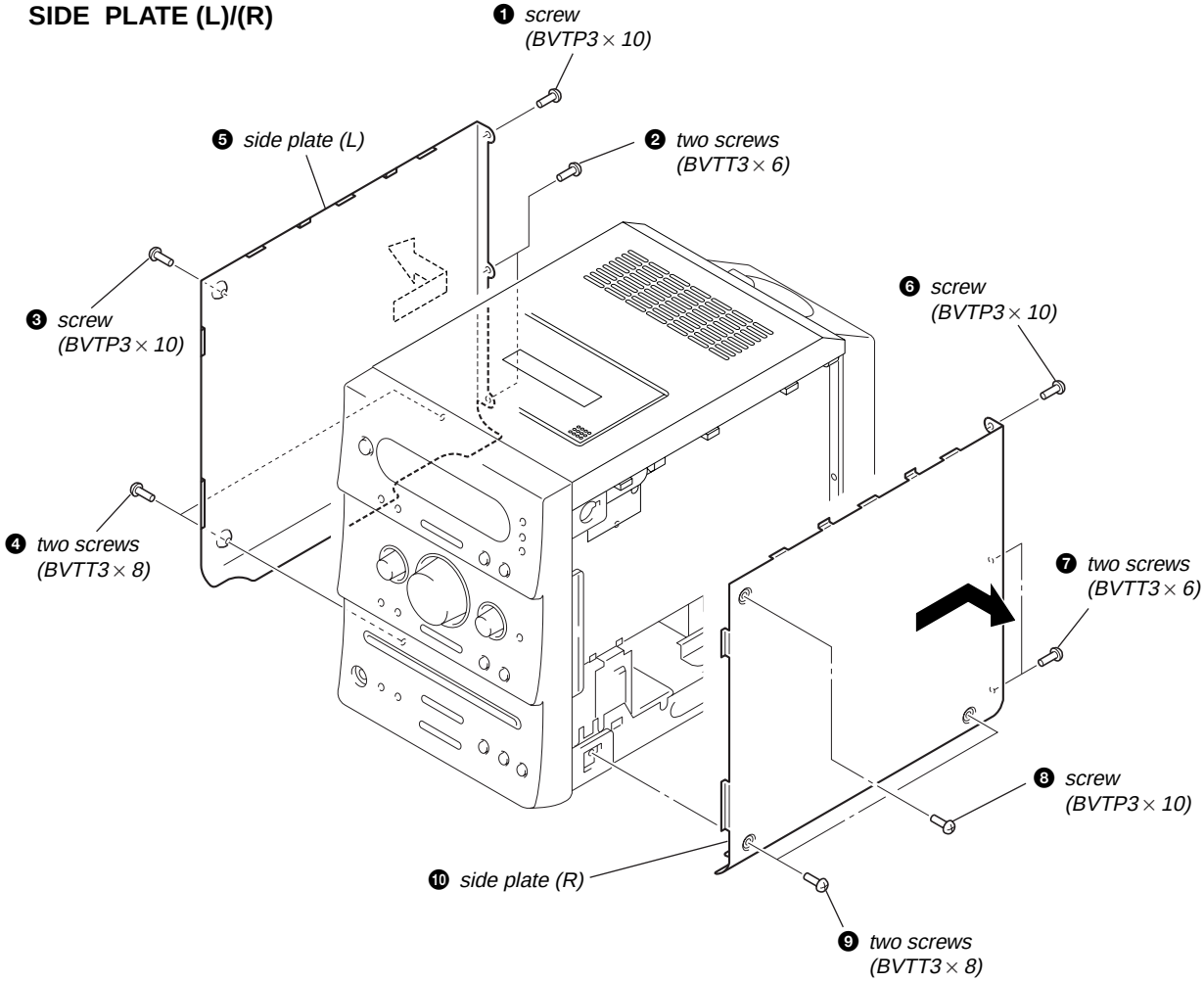
• This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

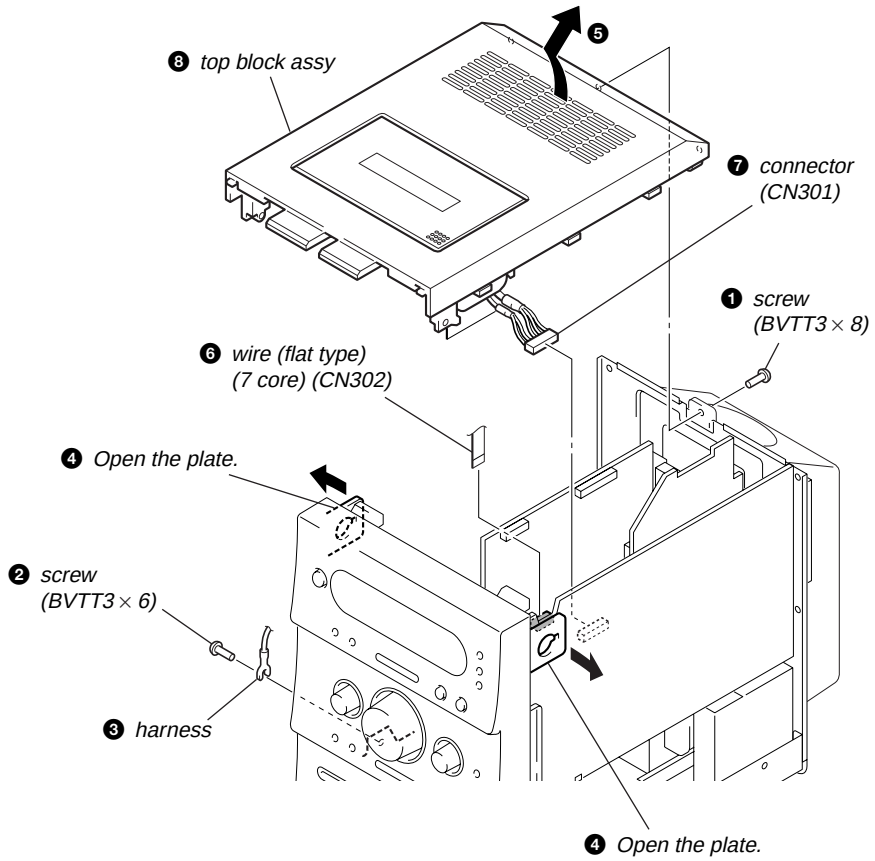

SET
3-2. SIDE PLATE (L)/(R) (Page 9)
3-3. TOP BLOCK ASSY (Page 9)
3-5. FRONT PANEL SECTION (Page 10)
3-4. TAPE MECHANISM DECK (CMAL1Z234A) (Page 10)
3-6. MAIN BOARD (Page 11)
3-7. CD MECHANISM DECK BLOCK (Page 11)
3-8. BASE UNIT (BU-F1BD81A) (Page 12)
3-11. CHASSIS (TOP) (Page 13)
3-15. HOLDER (BU215) ASSY (Page 16)
3-9. MOTOR GEAR ASSY (SLED) (M102), CD BOARD (Page 12)
3-14. DRIVER BOARD (Page 15)
3-12. LEVER (LOADING-L/R) (Page 14)
3-13. LEVER (DISC SENSOR)/ (DISC STOP) (Page 15)
3-19. GEAR (IDL-C) (Page 18)
3-16. LEVER (BU LOCK) (Page 16)
3-10. OPTICAL PICK-UP (KSM-215DCP) (Page 13)
3-17. CLOSE LEVER (Page 17)
3-18. LEVER (DIR), GEAR (IDL-B) (Page 17)

Note: Follow the disassembly procedure in the numerical order given.

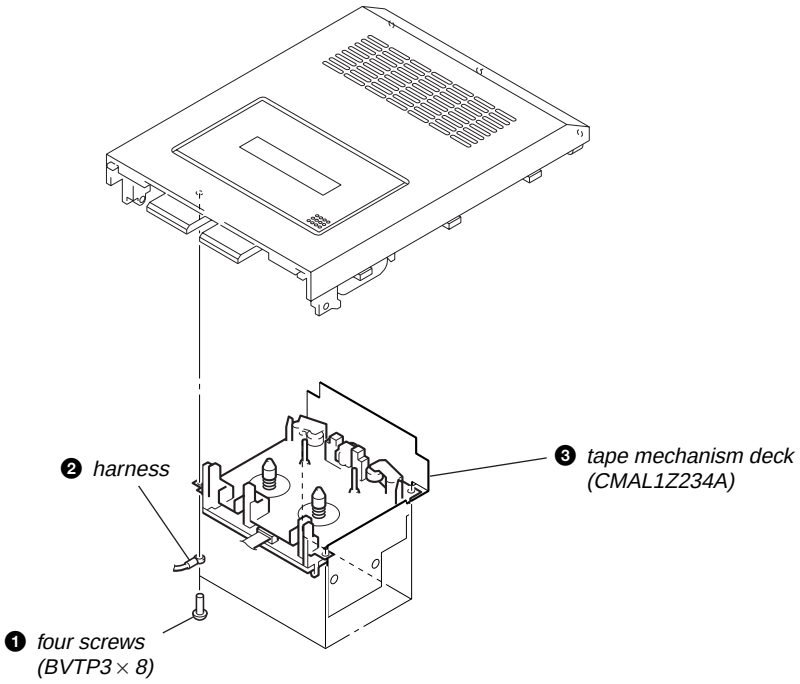
3-2. SIDE PLATE (L)/(R)


❶ screw (BVTP3 × 10)
❷ two screws (BVTT3 × 6)
❸ screw (BVTP3 × 10)
❹ two screws (BVTT3 × 8)
❺ side plate (L)
❻ screw (BVTP3 × 10)
❼ two screws (BVTT3 × 6)
❽ screw (BVTP3 × 10)
❾ two screws (BVTT3 × 8)
❿ side plate (R)

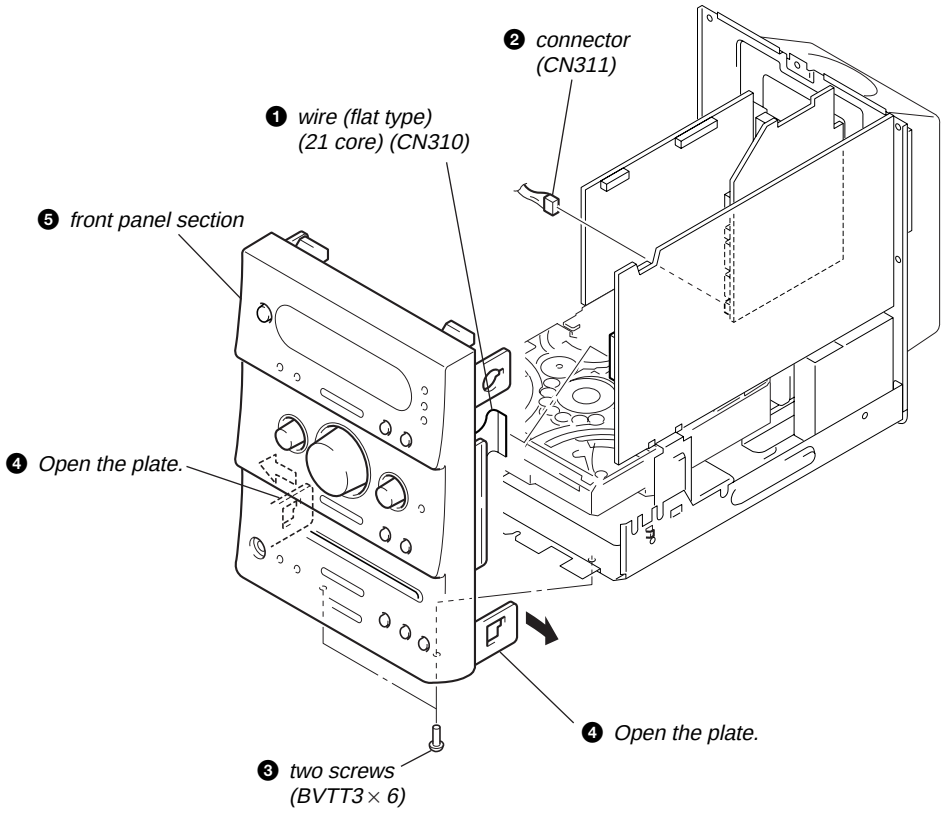
3-3. TOP BLOCK ASSY



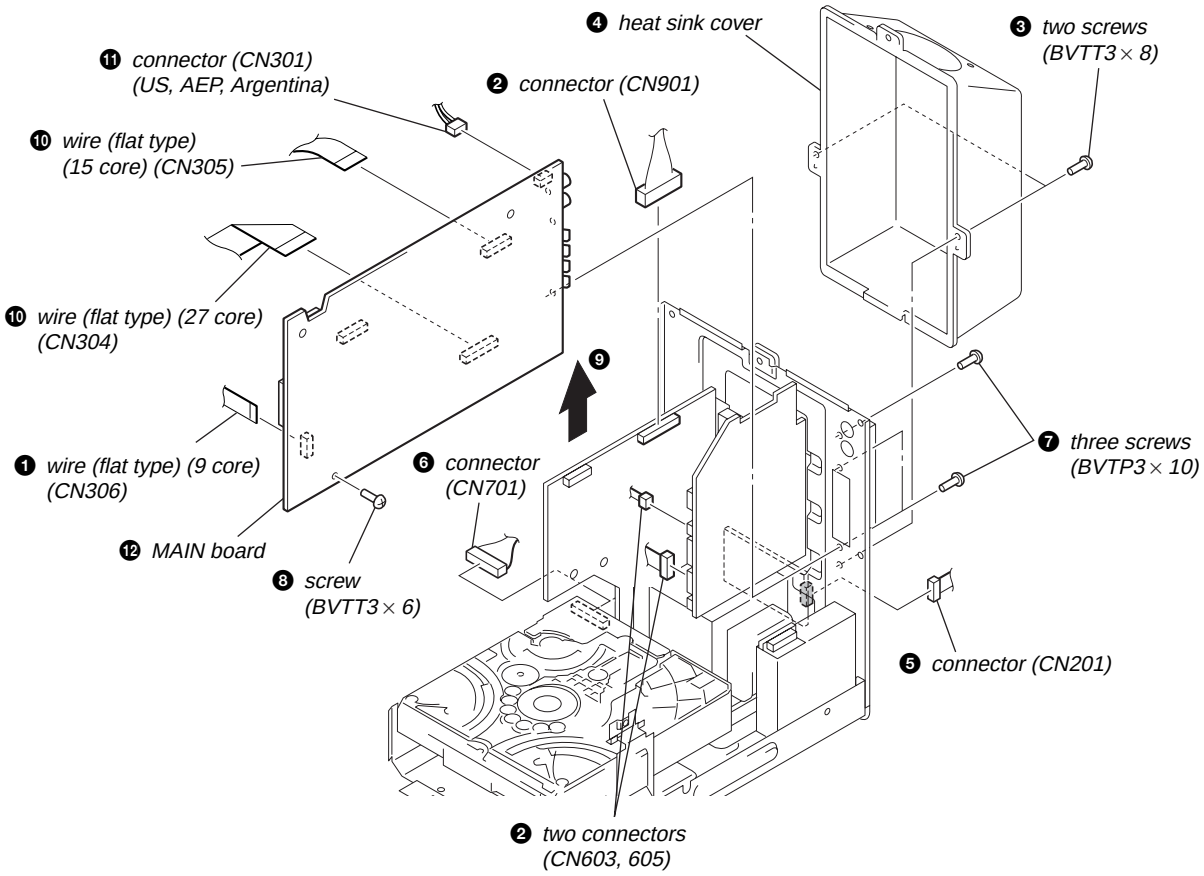
3-4. TAPE MECHANISM DECK (CMAL1Z234A)



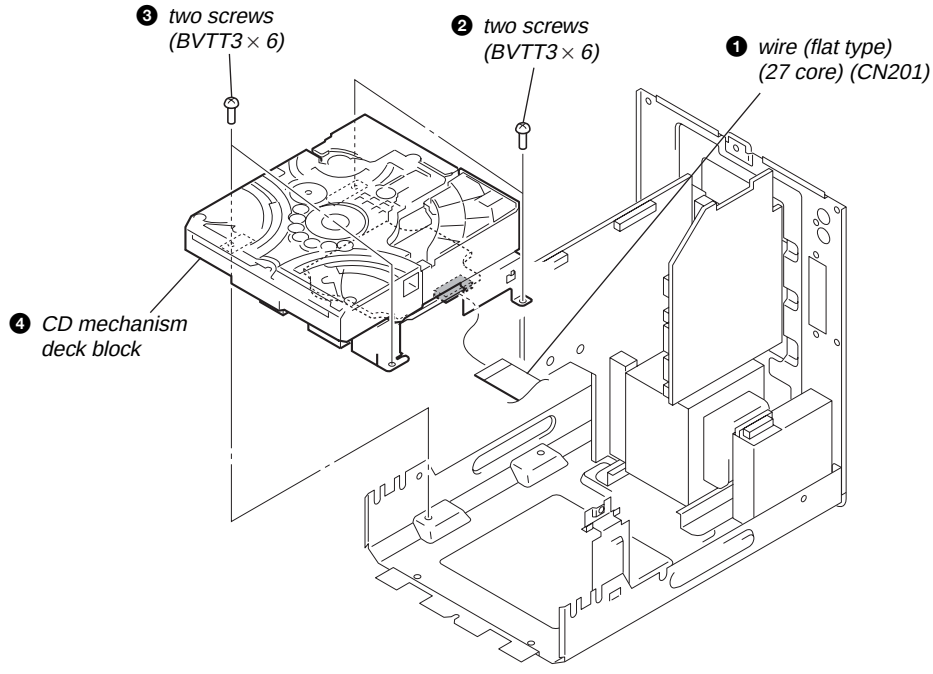
3-5. FRONT PANEL SECTION



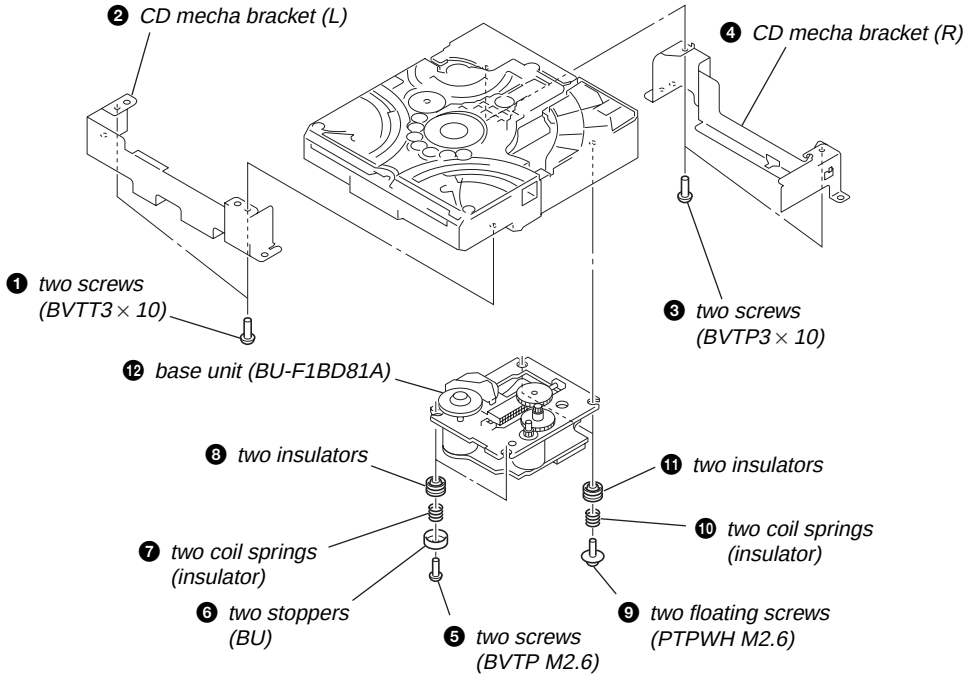
3-6. MAIN BOARD


❹ heat sink cover
❸ two screws (BVTT3 × 8)
⓫ connector (CN301) (US, AEP, Argentina)
❷ connector (CN901)
⓾ wire (flat type) (15 core) (CN305)
⓾ wire (flat type) (27 core) (CN304)
❾
❼ three screws (BVTP3 × 10)
❶ wire (flat type) (9 core) (CN306)
❻ connector (CN701)
⓬ MAIN board
❽ screw (BVTT3 × 6)
❺ connector (CN201)
❷ two connectors (CN603, 605)

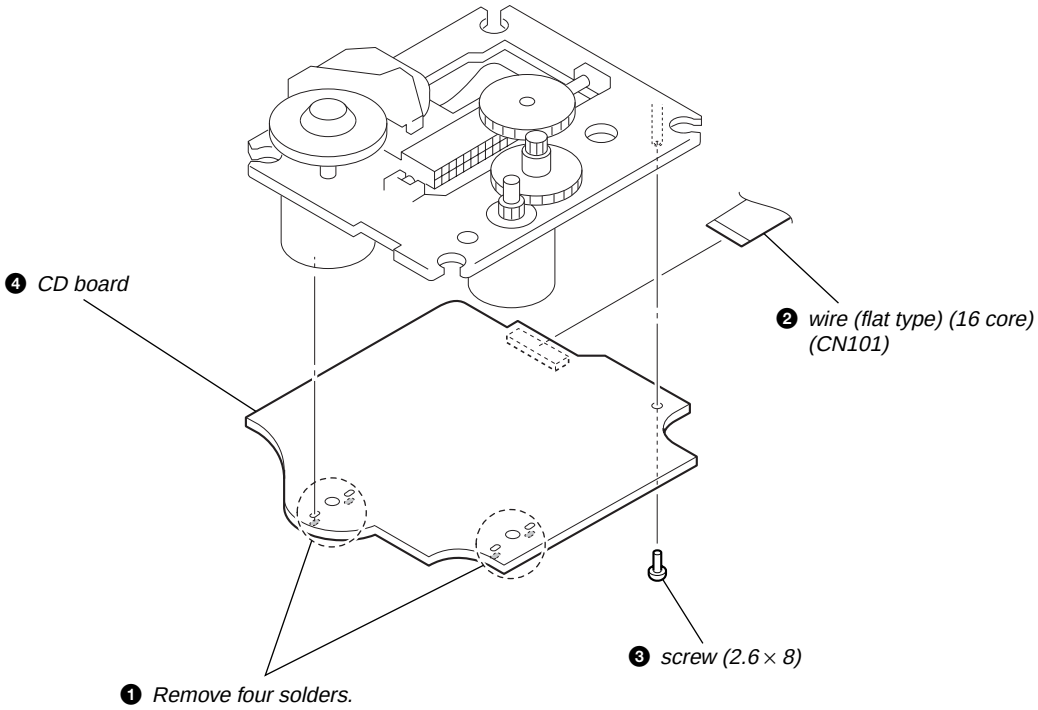
3-7. CD MECHANISM DECK BLOCK



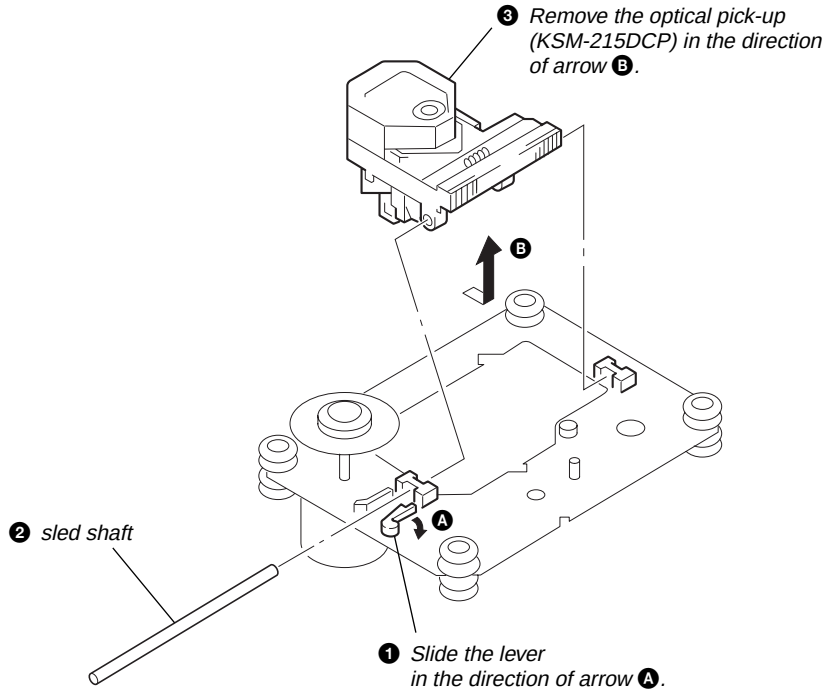
3-8. BASE UNIT (BU-F1BD81A)


❷ CD mecha bracket (L)
❹ CD mecha bracket (R)
❶ two screws (BVTT3 × 10)
❸ two screws (BVTP3 × 10)
⓬ base unit (BU-F1BD81A)
❽ two insulators
⓫ two insulators
❼ two coil springs (insulator)
⓾ two coil springs (insulator)
❻ two stoppers (BU)
❺ two screws (BVTP M2.6)
❾ two floating screws (PTPWH M2.6)

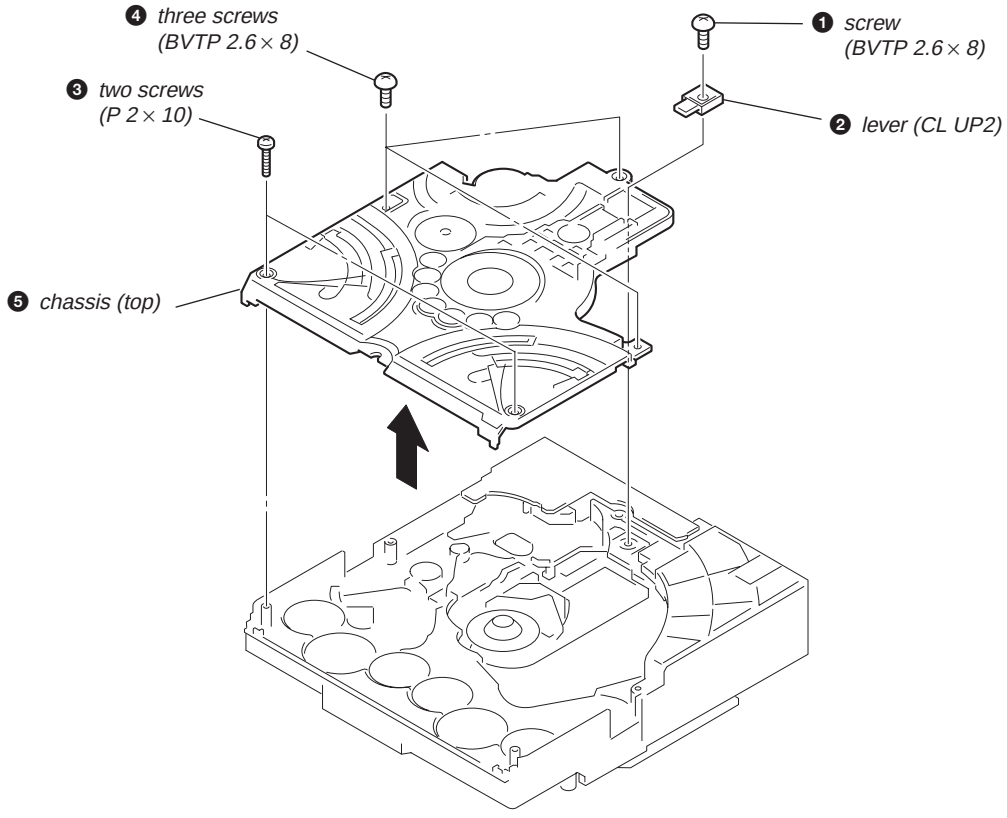
3-9. MOTOR GEAR ASSY (SLED) (M102), CD BOARD



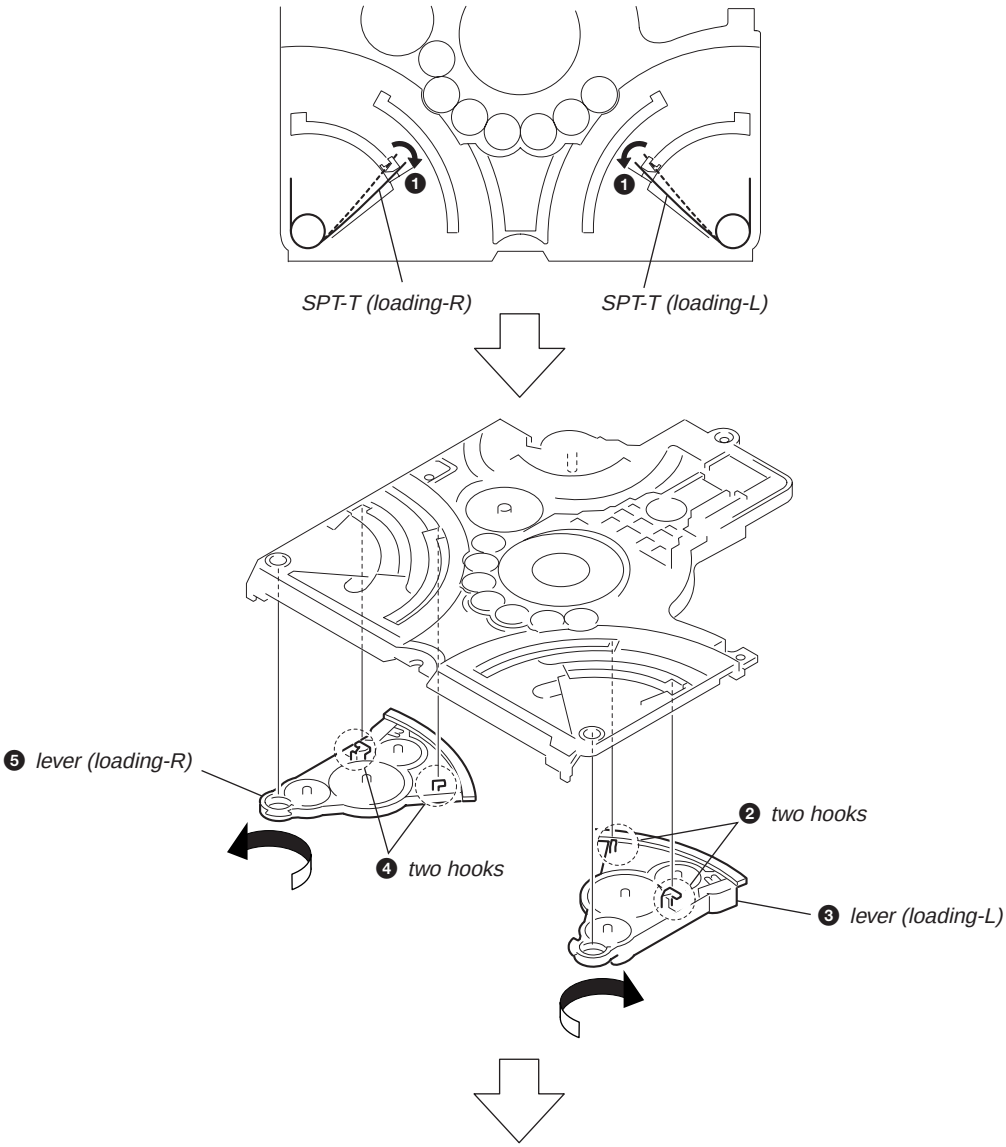
3-10. OPTICAL PICK-UP (KSM-215DCP)


❸ Remove the optical pick-up (KSM-215DCP) in the direction of arrow B.
B
A
❷ sled shaft
❶ Slide the lever in the direction of arrow A.

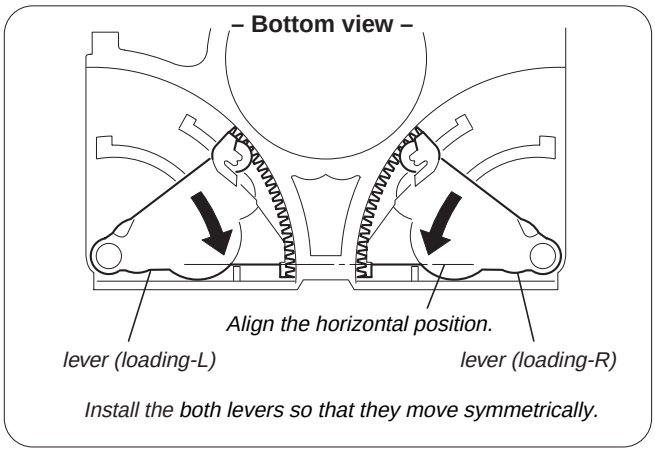
3-11. CHASSIS (TOP)



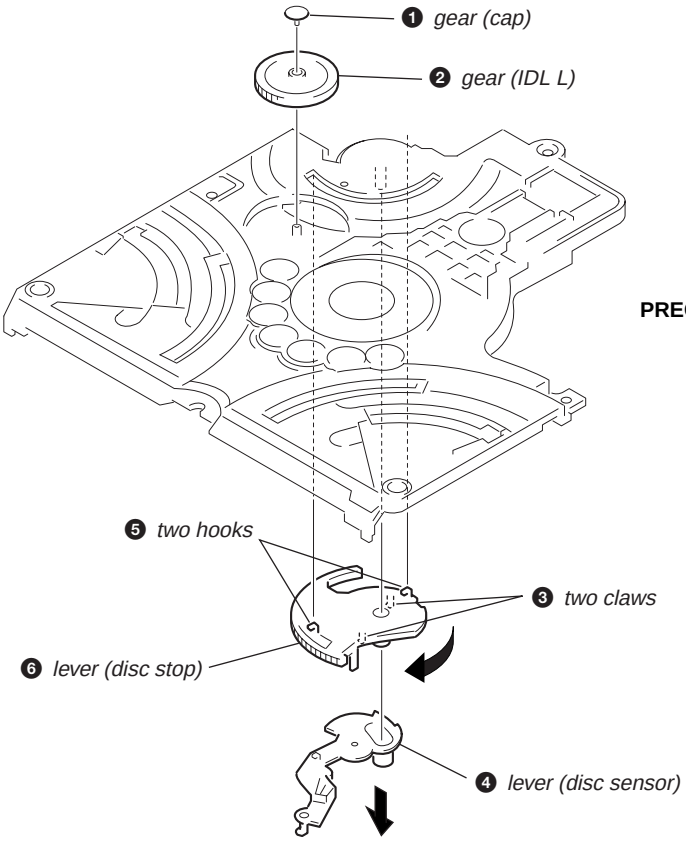
3-12. LEVER (LOADING-L/R)



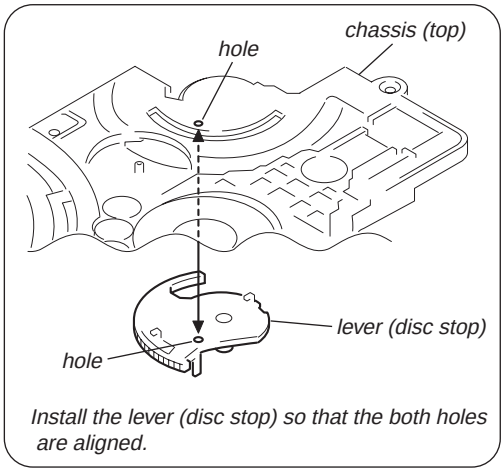
PRECAUTION DURING LEVER (LOADING R / L) INSTALLATION


– Bottom view –
Align the horizontal position.
lever (loading-L)
lever (loading-R)
Install the both levers so that they move symmetrically.

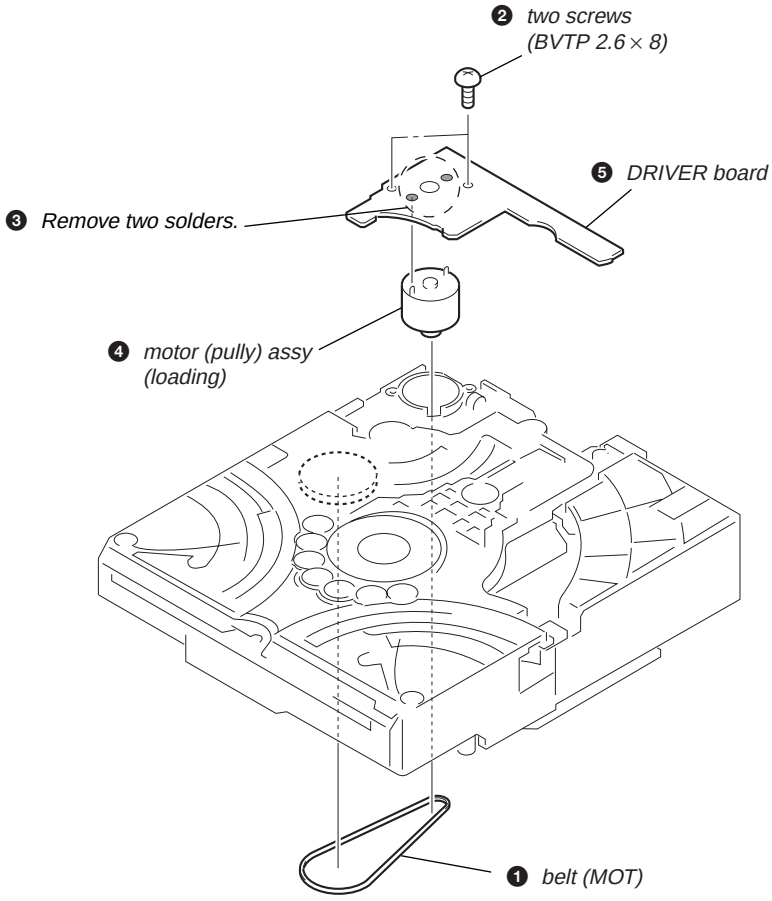
3-13. LEVER (DISC SENSOR)/(DISC STOP)



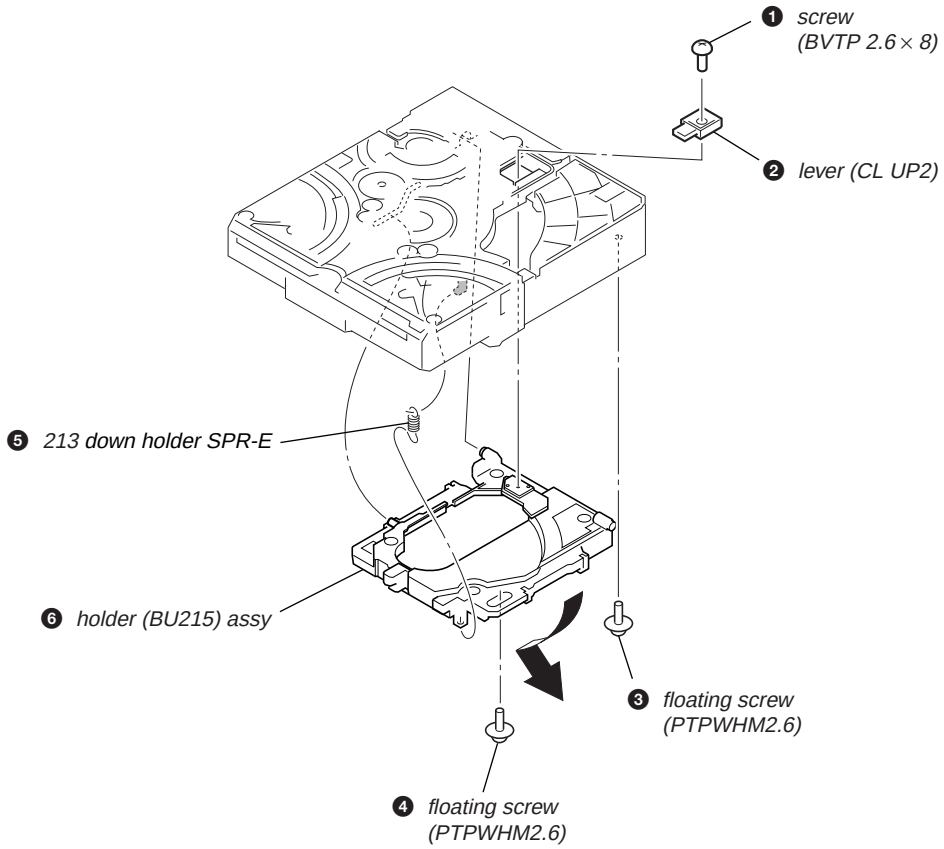
PRECAUTION DURING DISC STOP LEVER INSTALLATION



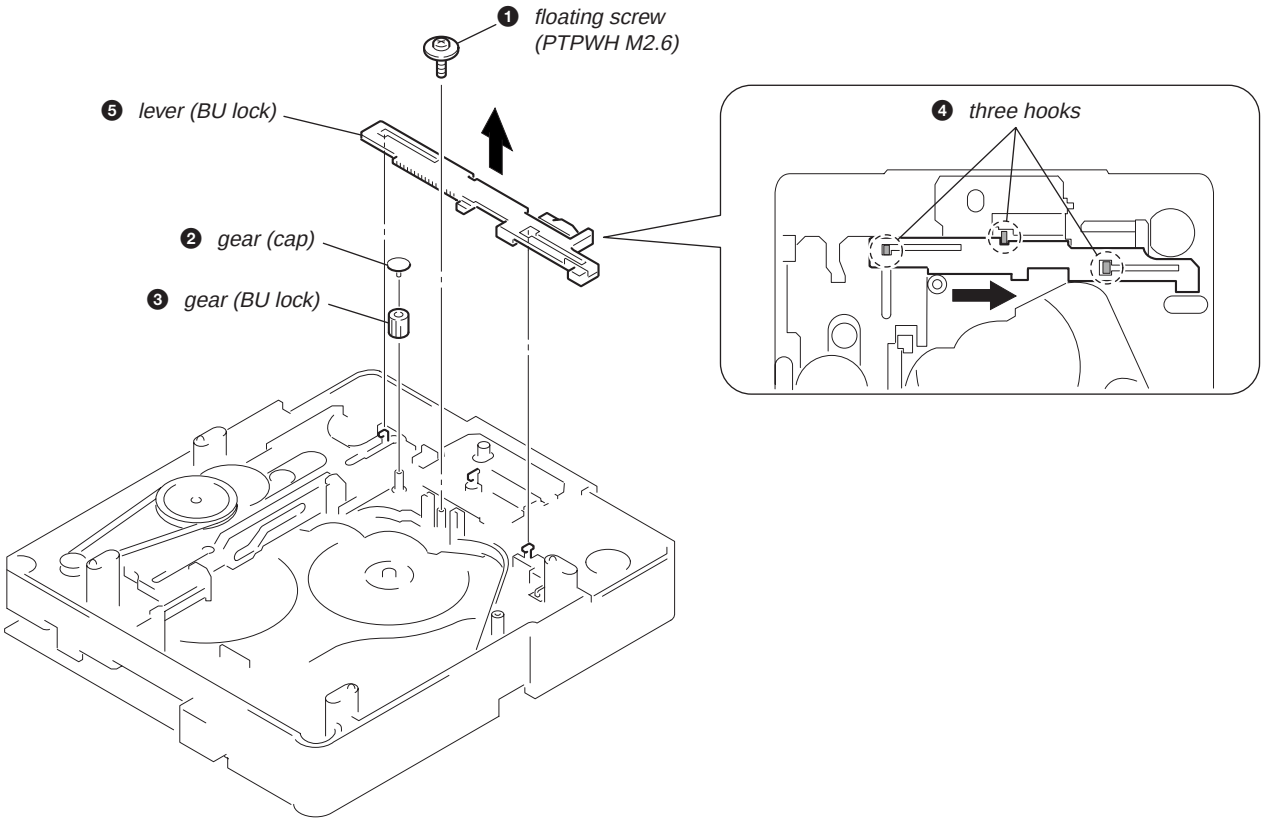
3-14. DRIVER BOARD



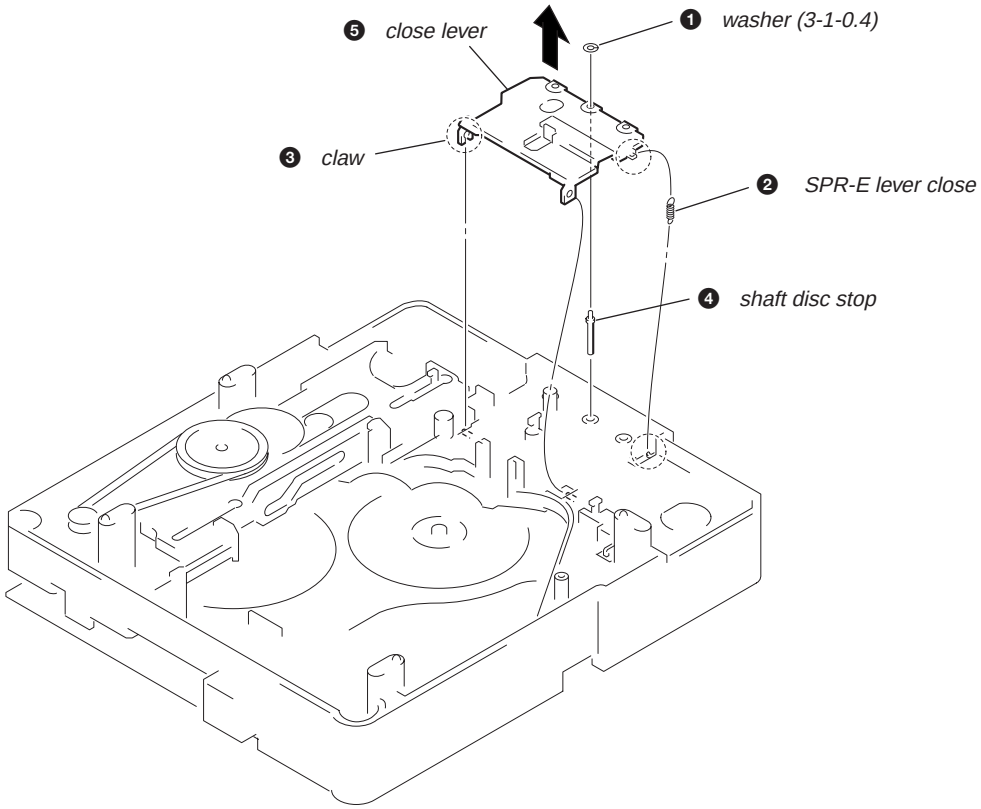
3-15. HOLDER (BU215) ASSY



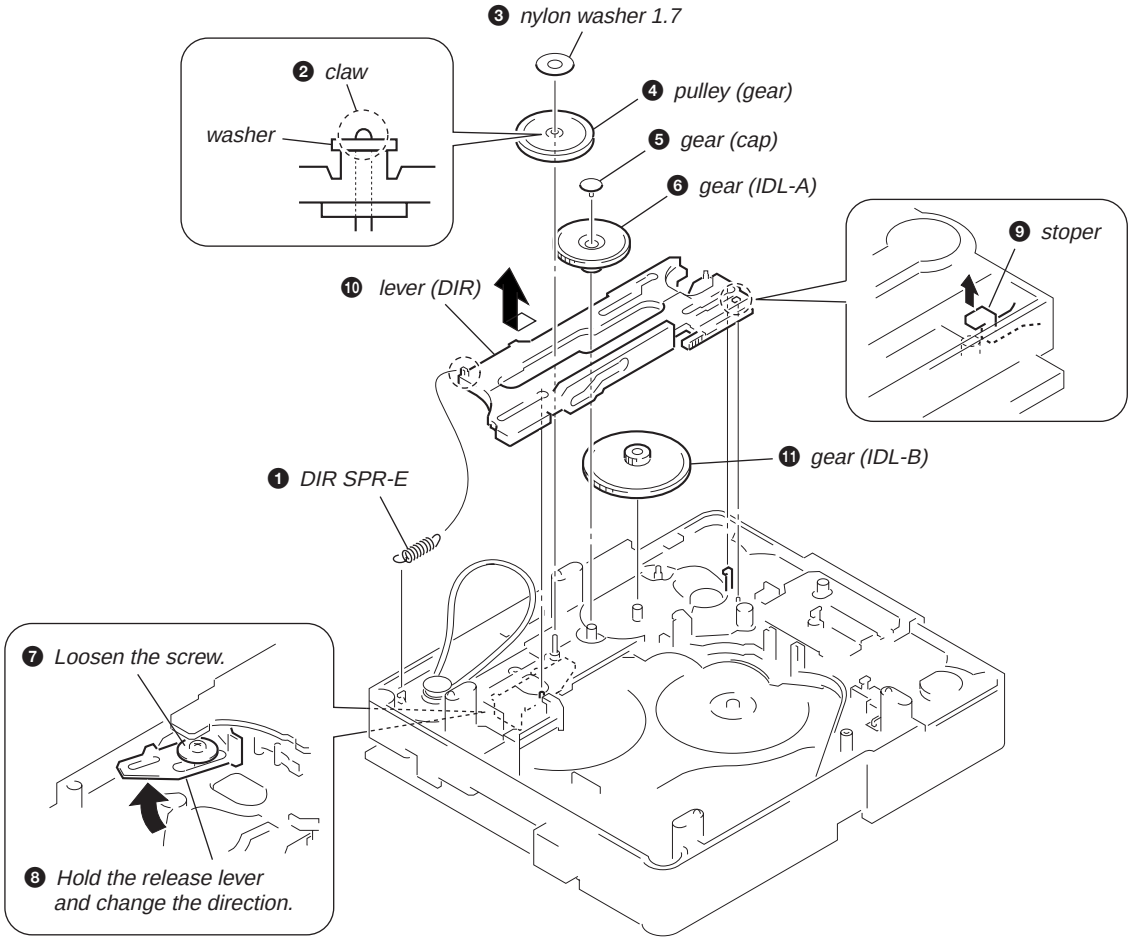
3-16. LEVER (BU LOCK)



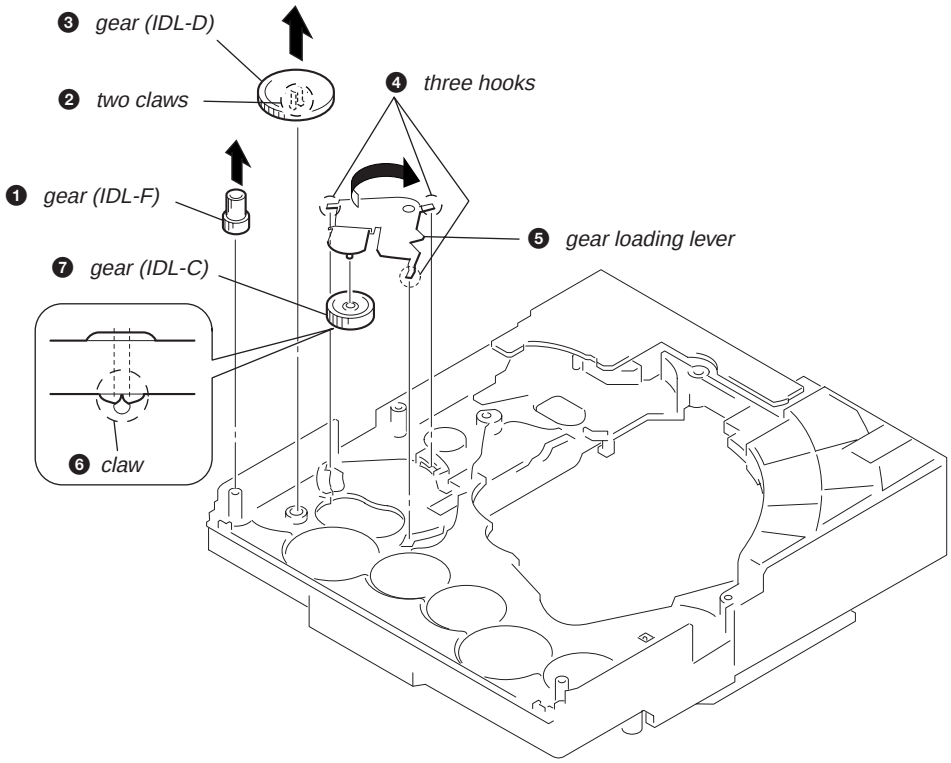
3-17. CLOSE LEVER



3-18. (LEVER DIR), GEAR (IDL-B)



3-19. GEAR (IDL-C)



SECTION 4
TEST MODE

[MC COLD RESET]

The cold reset clears all data including preset data stored in the memory to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. In the standby status, press the I/⏻ button to turn the power on.
2. Press three buttons of I/⏻, ■ (CD), and DSGX simultaneously.
3. The set is reset, and become standby status.

[COMMON TEST MODE]

Enter The Common Test Mode

Procedure:

1. In the standby status, press the I/⏻ button to turn the power on.
2. Press three buttons of REPEAT, ■ (TAPE), and DSGX simultaneously.
3. When the common test mode is activated, "SLEEP" and "PLAY" icons are blink on the fluorescent indicator tube.

AMP Test

Procedure:

1. In the common test mode, if turn the VOLUME knob clockwise, it displays "VOL MAX", and if turn the knob counterclockwise, it displays "VOL MIN".
2. If the TREBLE knobs are turned clockwise or counterclockwise, it displays "TONE FLAT".
3. If the BASS knobs are turned clockwise, it displays "TONE MAX", and if turn the knob counterclockwise, it displays "TONE MIN".
4. To release from this mode, disconnect the AC plug to turn the power off.

Tape Test

Procedure:

1. In the common test mode, insert a tape.
2. Input any audio signal from the VIDEO/MD jack (J301) on the MAIN board.
3. Press the ● REC button, and press the ◄► TAPE button to select the tape direction.
4. Press the ● REC button again to start recording.
5. If press the ◄◄ (TAPE) or ►► (TAPE) button, the tape is returned to recording start point by cue or review operation, and starts playback.
6. To release from this mode, disconnect the AC plug to turn the power off.

[PANEL TEST MODE]

Enter The Panel Test Mode

Procedure:

1. In the standby status, press the I/⏻ button to turn the power on.
2. Press three buttons of PLAY MODE, ■ (TAPE), and DSGX simultaneously.
3. When the panel test mode is activated, LEDs and segments of fluorescent indicator tube are all turned on.

Version Check

Procedure:

1. In the panel test mode (all LEDs and segments of fluorescent indicator tube are turned on), press the TUNING MODE button.
2. Destination indication and model type indication are displayed on the fluorescent indicator tube alternately.
3. From this status, each time the TUNING MODE button is pressed, it changes the version display of each module cyclically as follows.

Display	Module
MC	Main controller
GC	Display
CD	CD system
CDD	CD device master
CDMA	CDM upper module
CDMB	CDM lower module
BDA	BD upper module
BDB	BD lower module
ST	Tuner
TA	Amplifier
TM	Timer
TC	Tape

4. To date of any module, press the DSGX button.
5. To release from this mode, press three buttons of PLAY MODE, ■ (TAPE), and DSGX simultaneously.

Key Check

Procedure:

1. In the panel test mode (all LEDs and segments of fluorescent indicator tube are turned on), press the PLAY MODE button.
2. It displays "K 0 J0 V0" on the fluorescent indicator tube.
3. Each time a button is pressed, "K" value increases. However, once a button is pressed, it is no longer taken into account. All keys are pressed, display becomes "K26".
4. "V" value increases like 1, 2, 3 ... if turn the VOLUME knob clockwise, or it decreases like 0, 9, 8 ... if turn the knob counterclockwise.
   "J" value increases like 1, 2, 3 ... if turn the BASS or TREBLE knob clockwise, or it decreases like 0, 9, 8 ... if turn the knob counterclockwise.
5. To release from this mode, press three buttons of PLAY MODE, ■ (TAPE), and DSGX simultaneously.

[CD REPEAT 5 LIMIT CANCEL MODE]

Number of repeat for CD playback is 5 times when the repeat mode is "REPEAT". This mode enables CD to repeat playback for limitless times.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the FUNCTION button to select CD function.
3. Press three buttons of ⏮ ◀◀ (CD), ■ (TAPE), and DSGX simultaneously.
4. It enters the CD repeat 5 limit cancel mode and display "LIMIT OFF"
5. To release this mode, press the I/⏻ button to turn the power off.

[CD SHIP MODE]

This mode can run the CD sled motor optionally. Use this mode, for instance, when cleaning the optical pick-up.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the FUNCTION button to select CD function.
3. Press three buttons of TUNING MODE, ■ (CD), and I/⏻ simultaneously. *1
4. Set to the CD ship mode. (chucking on)
5. After blink "STANDBY", "LOCK" is displayed, disconnect the AC plug.

   *1) If press three buttons of DIRECTION, ▶II (CD), and DSGX simultaneously, Activate the CD ship mode and MC cold reset.

[CD SLOT LOCK]

This mode is for the antitheft of CD disc in shop. (not for transport)

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the FUNCTION button to select CD function.
3. Insert a disc.
4. While pressing the ■ (CD) button, press the ⏏ (CD) button for more 5 seconds.
5. The message "LOCKED" is displayed and the disc slot is locked. (Even if exiting from this mode, the disc slot is still locked)
6. If press the ⏏ (CD) button to eject the disc, the message "LOCKED" is displayed and can not eject the disc.
7. To release this lock, while pressing the ■ (CD) button, press the ⏏ (CD) button for 5 seconds again.
8. The message "UNLOCKED" is displayed and the disc slot is unlocked.

[CD POWER MANAGE]

This mode is for switch the CD power supply on/off. Even if this state pulls out AC plug, it is held.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the FUNCTION button to select CD function.
3. Press the I/⏻ button again to turn the power off (standby).
4. While pressing the ■ (CD) button, press the I/⏻ button.
5. It turns power on and display "CD POWER", then display "ON" or "OFF".

[CHANGE-OVER THE AM TUNING INTERVAL] (EXCEPT AEP model)

The AM tuning interval can be changed over 9 kHz or 10 kHz.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the BAND, TUNER button to select TUNER (AM) function.
3. Press the I/⏻ button again to turn the power off (standby).
4. While pressing the TUNING + button, press the I/⏻ button.
5. It turns power on and display "STEP 9kHz" or "STEP 10kHz", and thus the tuning interval is changed over.

[MD/VIDEO FUNCTION CHANGE]

Select either VIDEO or MD of the external input.

Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the FUNCTION button to select MD or VIDEO function.
3. Press the I/⏻ button again to turn the power off (standby).
4. While pressing the FUNCTION button, press the I/⏻ button.
5. The another function of the previous function is selected and display "MD" or "VIDEO".

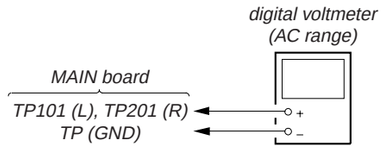
SECTION 5
ELECTRICAL ADJUSTMENTS

DECK SECTION

1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjust.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed for both L-CH and R-CH.
6. Switches and controls should be set as follows unless otherwise specified.

REC BAIS ADJUSTMENT

Setting:

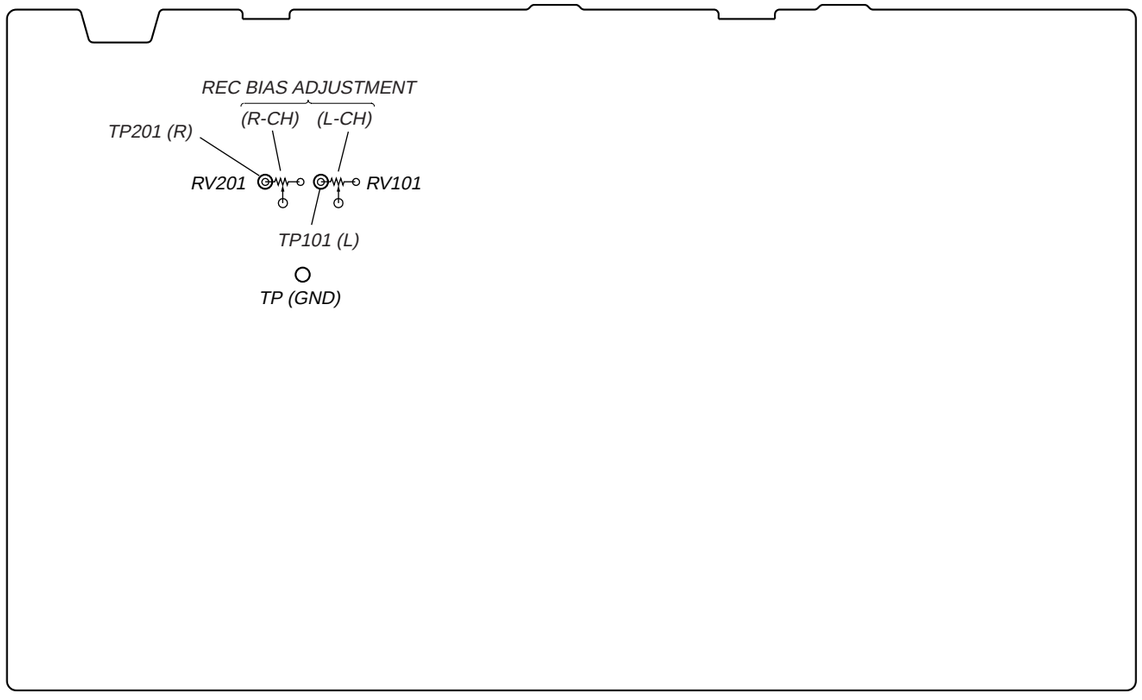


Procedure:

1. Connect a digital voltmeter (AC range) to TP101 (L), TP201 (R) and TP (GND) on the MAIN board.
2. Insert a tape.
3. Press the I/⏻ button to turn the power on, and press the FUNCTION button to select TAPE function.
4. Press the ● REC button twice to start recording.
5. Adjust RV101 (L-ch), RV201 (R-ch) on the MAIN board so that the digital voltmeter reads AC 6.15 V.
6. Connect an oscilloscope or frequency counter to TP101 (L), TP201 (R) and TP (GND) on the MAIN board.
7. Confirm that the frequency is 82 kHz ±3 kHz.

Adjustment Location:

– MAIN BOARD (Conductor Side) –

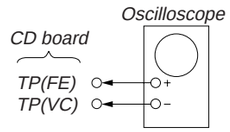


CD SECTION

Note:

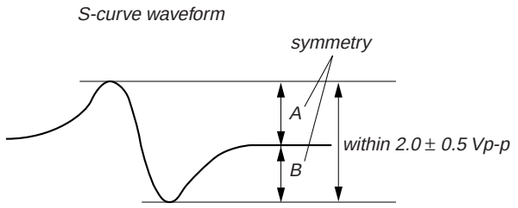
1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S-CURVE CHECK



Procedure :

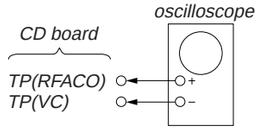
1. Connect an oscilloscope to TP (FE) and TP (VC) on the CD board.
2. Press the I/⏻ button to turn the power ON.
3. Load a disc (YEDS-18) and actuate the focus search. (In consequence of open and close the disc tray, actuate the focus search)
4. Confirm that the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 2.0 ± 0.5 Vp-p.



Note:
- Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
- Take sweep time as long as possible and light up the brightness to obtain best waveform.

Connecting Location: CD board

RFAC LEVEL CHECK

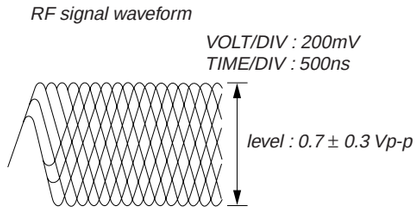


Procedure :

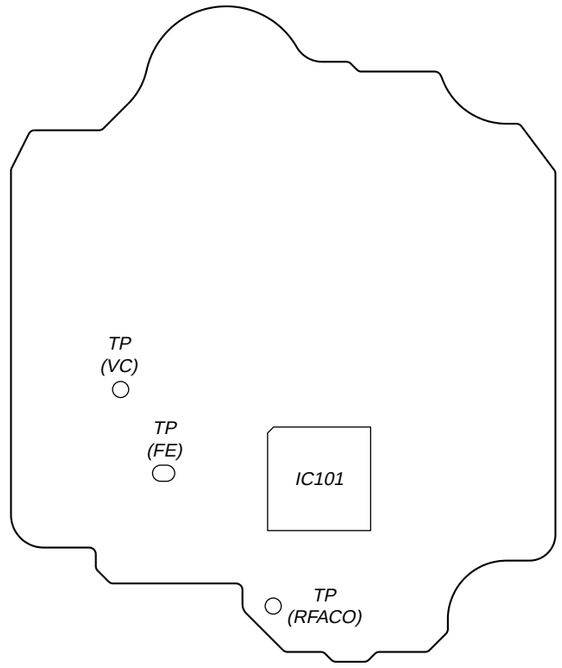
1. Connect an oscilloscope to TP (RFACO) and TP (VC) on the CD board.
2. Press the I/⏻ button to turn the power ON.
3. Load a disc (YEDS-18) and playback.
4. Confirm that oscilloscope waveform is clear and check if RFAC signal level is correct or not.

Note: Clear RFAC signal waveform means that the shape " ◊ " can be clearly distinguished at the center of the waveform.

Connecting Location: CD board



– CD BOARD (Conductor Side) –



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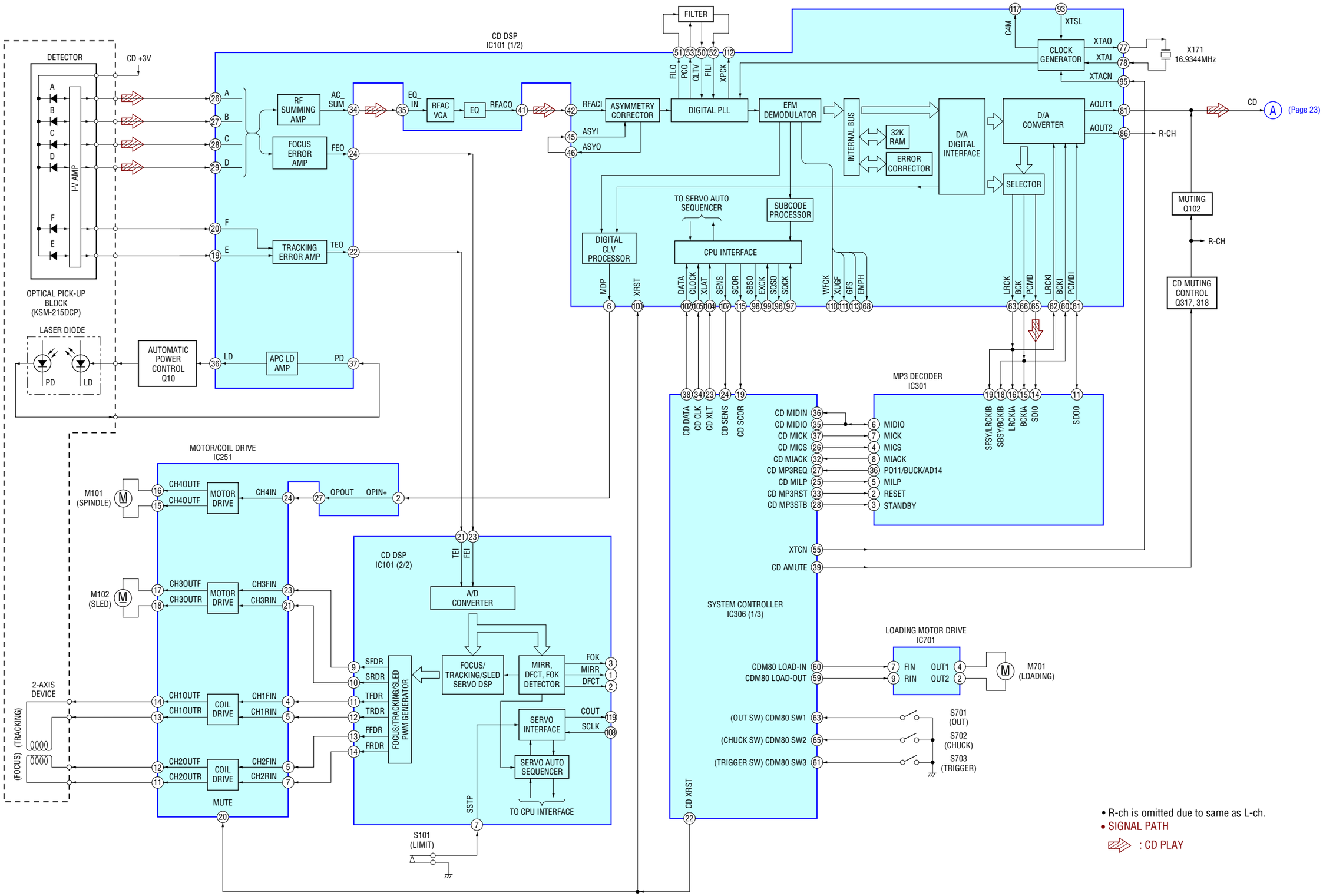
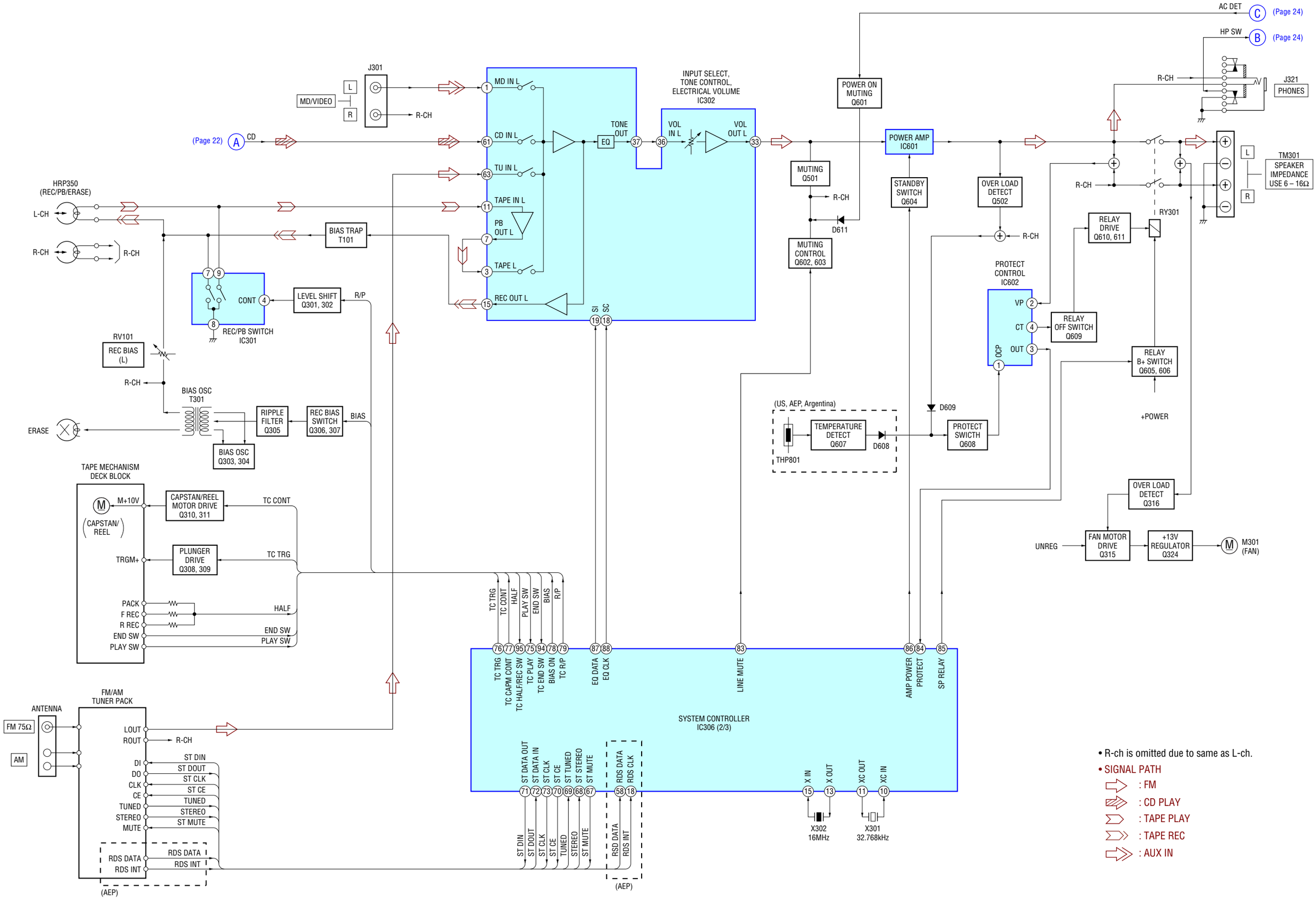
SECTION 6
DIAGRAMS

6-1. BLOCK DIAGRAM – CD SERVO Section –



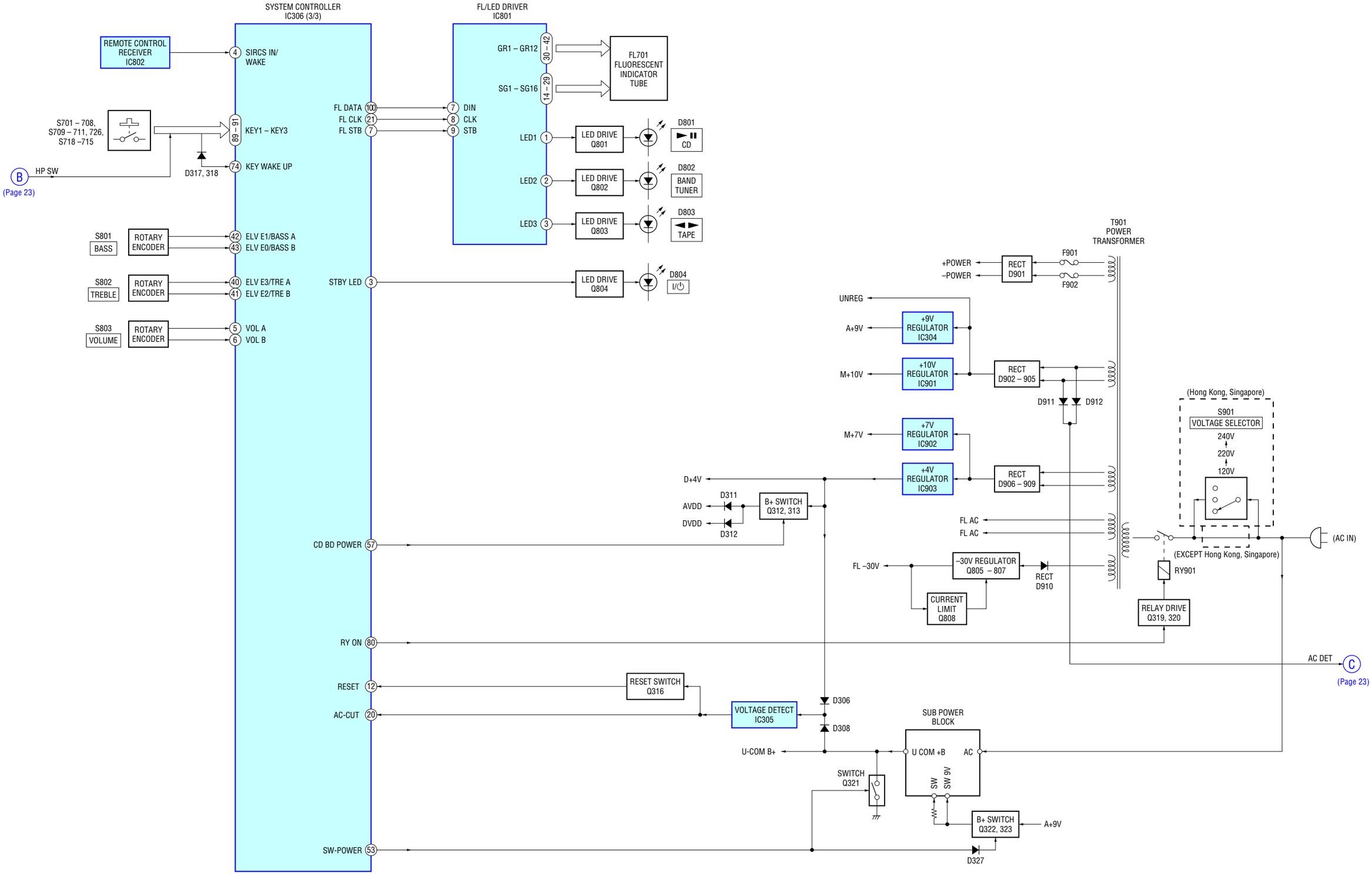
• R-ch is omitted due to same as L-ch.
• SIGNAL PATH
: CD PLAY

6-2. BLOCK DIAGRAM – MAIN Section –



- R-ch is omitted due to same as L-ch.
- SIGNAL PATH
  - : FM
  - : CD PLAY
  - : TAPE PLAY
  - : TAPE REC
  - : AUX IN

6-3. BLOCK DIAGRAM – PANEL/POWER SUPPLY Section –



6-4. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

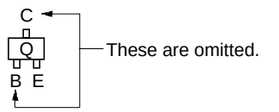
Note on Printed Wiring Board:

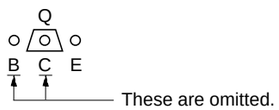
- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ⬚← : indicates side identified with part number.
- △ : internal component.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

- Indication of transistor.





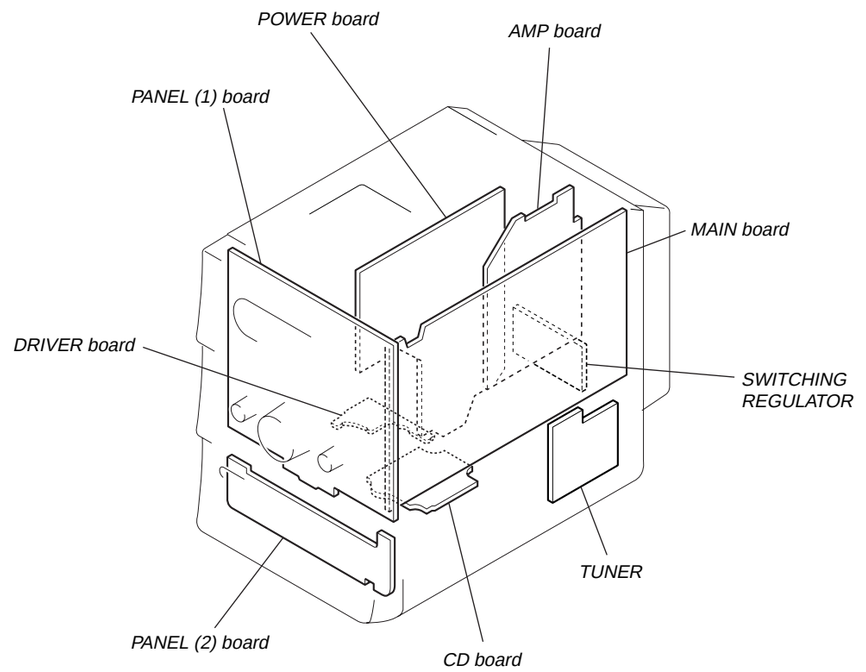
Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  – CD Board –
  no mark : CD PLAY
  – Other Boards –
  no mark : FM
  ( ) : CD PLAY
  [ ] : TAPE PLAY
  〈〈 〉〉 : TAPE REC
  ✻ : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : TUNER (FM/AM)
  : TAPE PLAY
  : TAPE REC
  : CD PLAY
  : AUX IN
- Abbreviation
  AR : Argentina model
  AUS : Australian model
  HK : Hong Kong model
  KR : Korean model
  SP : Singapore model

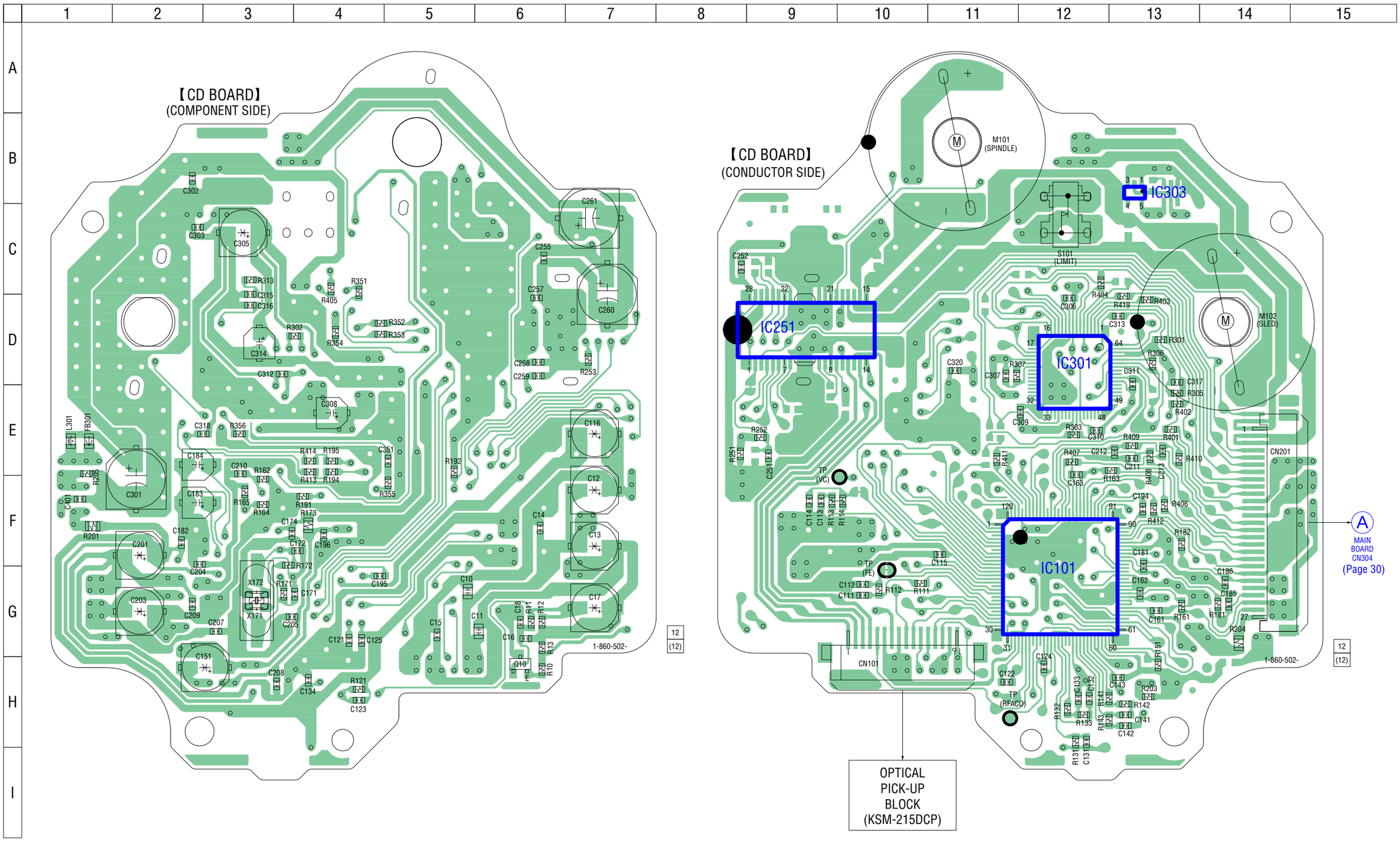
- **Circuit Boards Location**



6-5. PRINTED WIRING BOARD – CD Board –

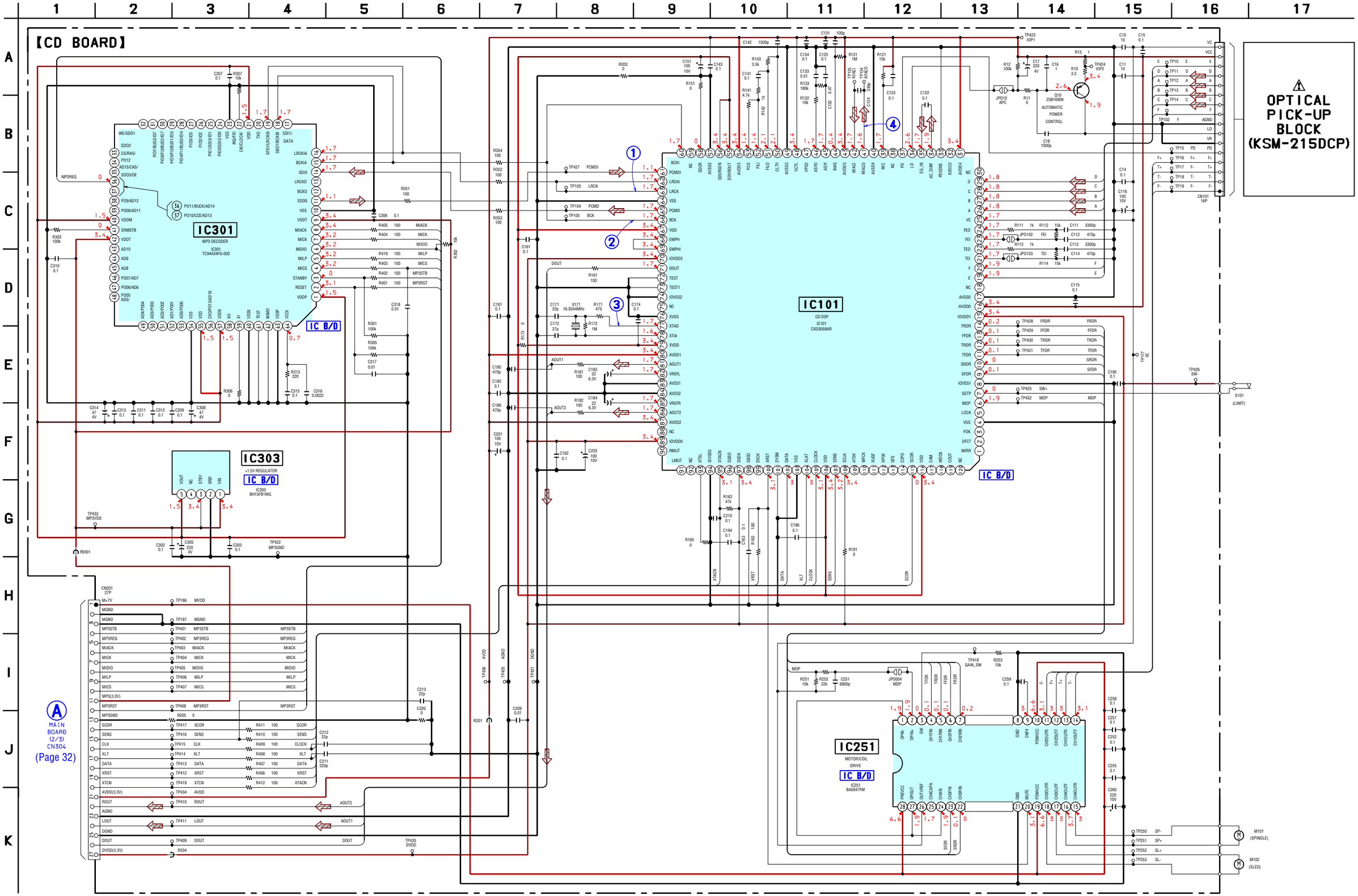
• See page 25 for Circuit Boards Location.

:Uses unleaded solder.



6-6. SCHEMATIC DIAGRAM – CD Board –

• See page 42 for IC Block Diagrams. • See page 29 for Waveforms.

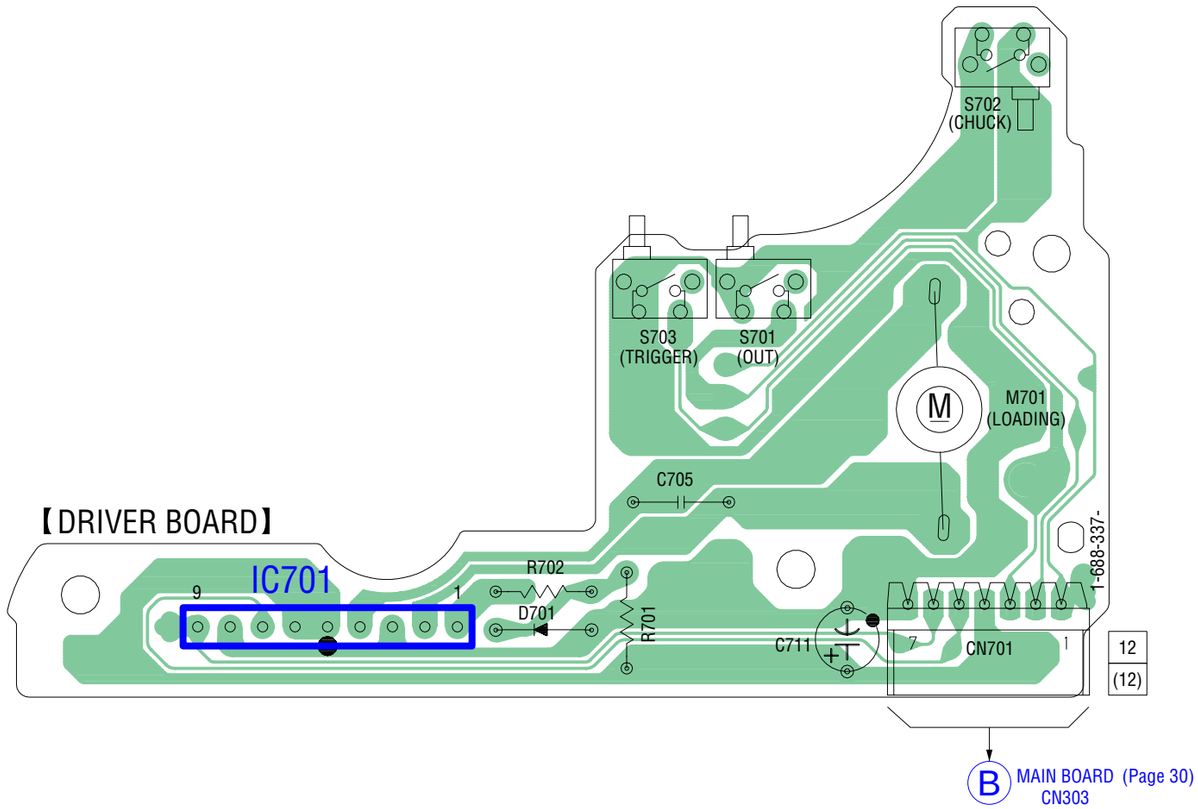


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

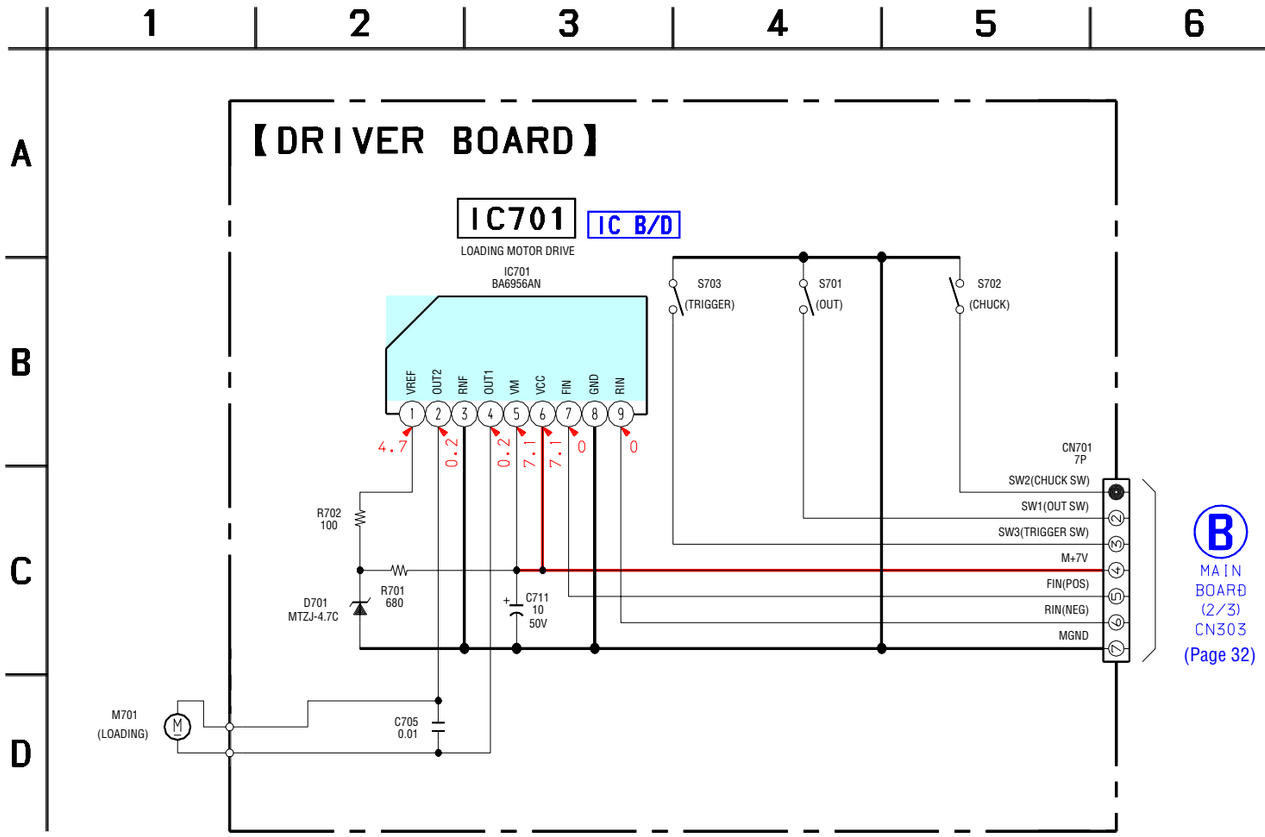
6-7. PRINTED WIRING BOARD – DRIVER Board –

• See page 25 for Circuit Boards Location.

:Uses unleaded solder.



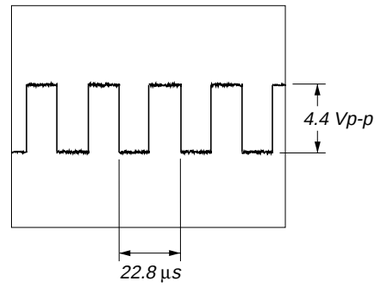
6-8. SCHEMATIC DIAGRAM – DRIVER Board – • See page 42 for IC Block Diagram.



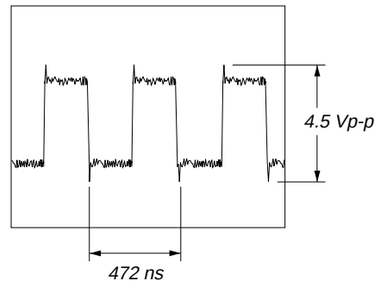
• Waveforms

– CD Board –

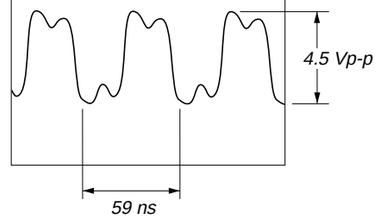
① IC101 ㊸ (LRCK)



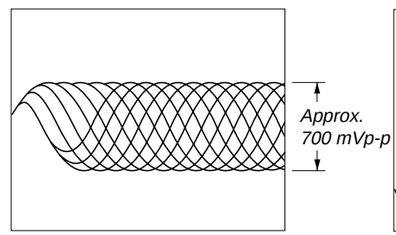
② IC101 ㊻ (BCK)



③ IC101 ㊼ (XTAO)

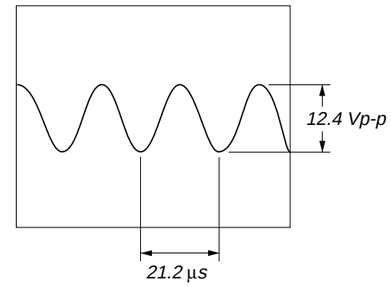


④ IC101 ㊶ (RFACO)

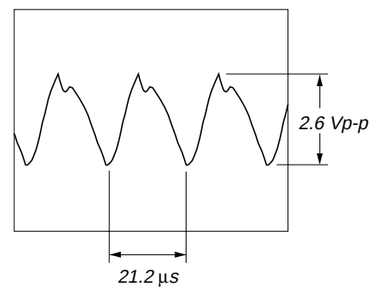


– MAIN Board –

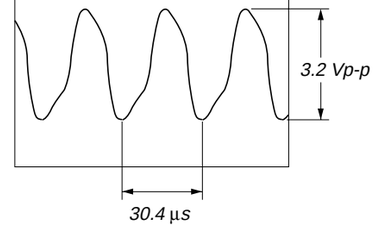
① Q303, 304 (Base) (REC Mode)



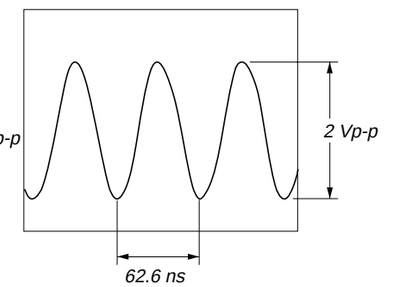
② Q303, 304 (Collector) (REC Mode)



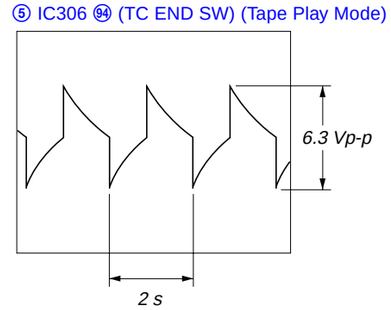
③ IC306 ⑪ (XCOUT)



④ IC306 ⑬ (XOUT)



⑤ IC306 ㊹ (TC END SW) (Tape Play Mode)

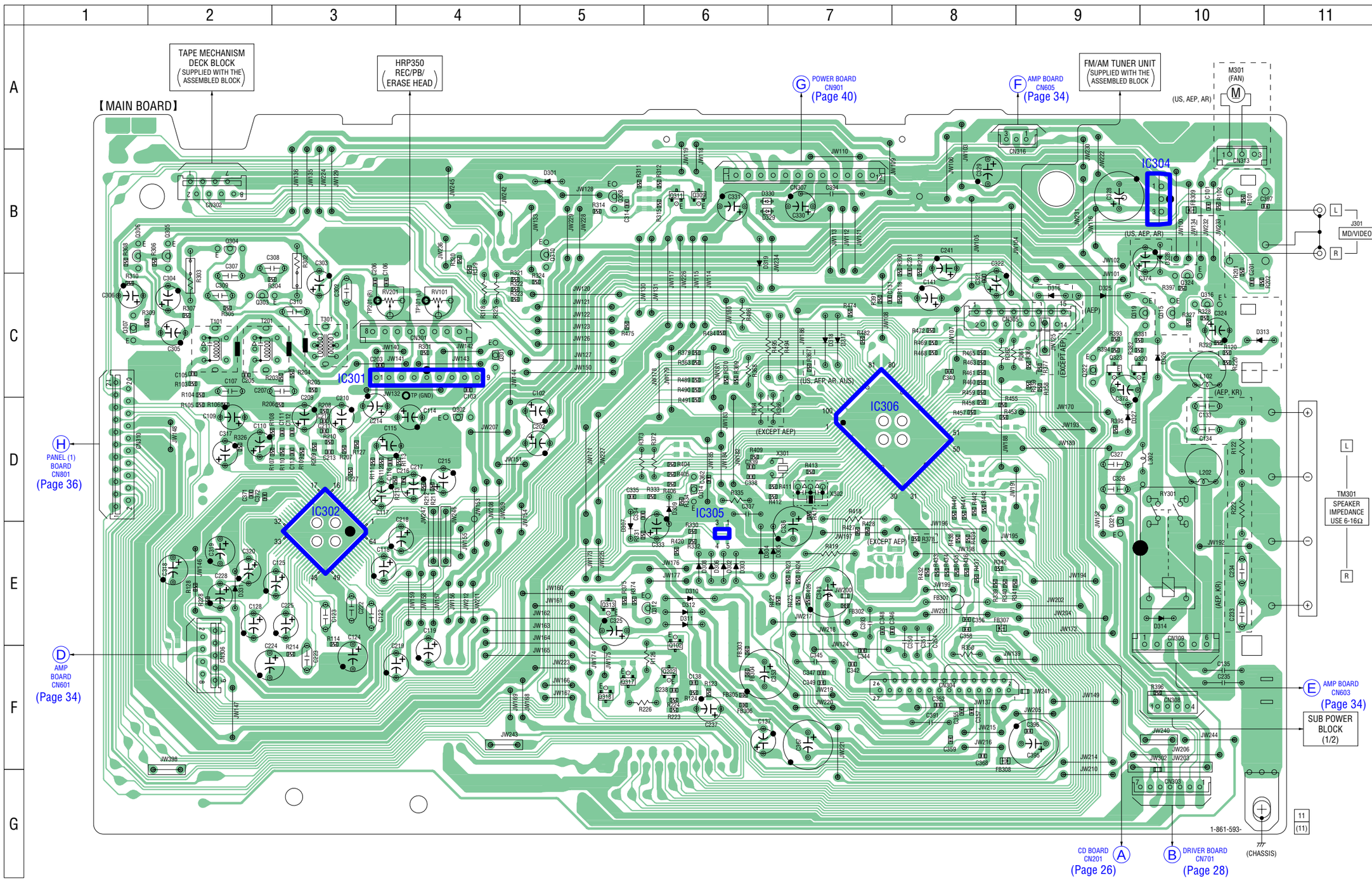


6-9. PRINTED WIRING BOARD – MAIN Board –

• See page 25 for Circuit Boards Location. :Uses unleaded solder.

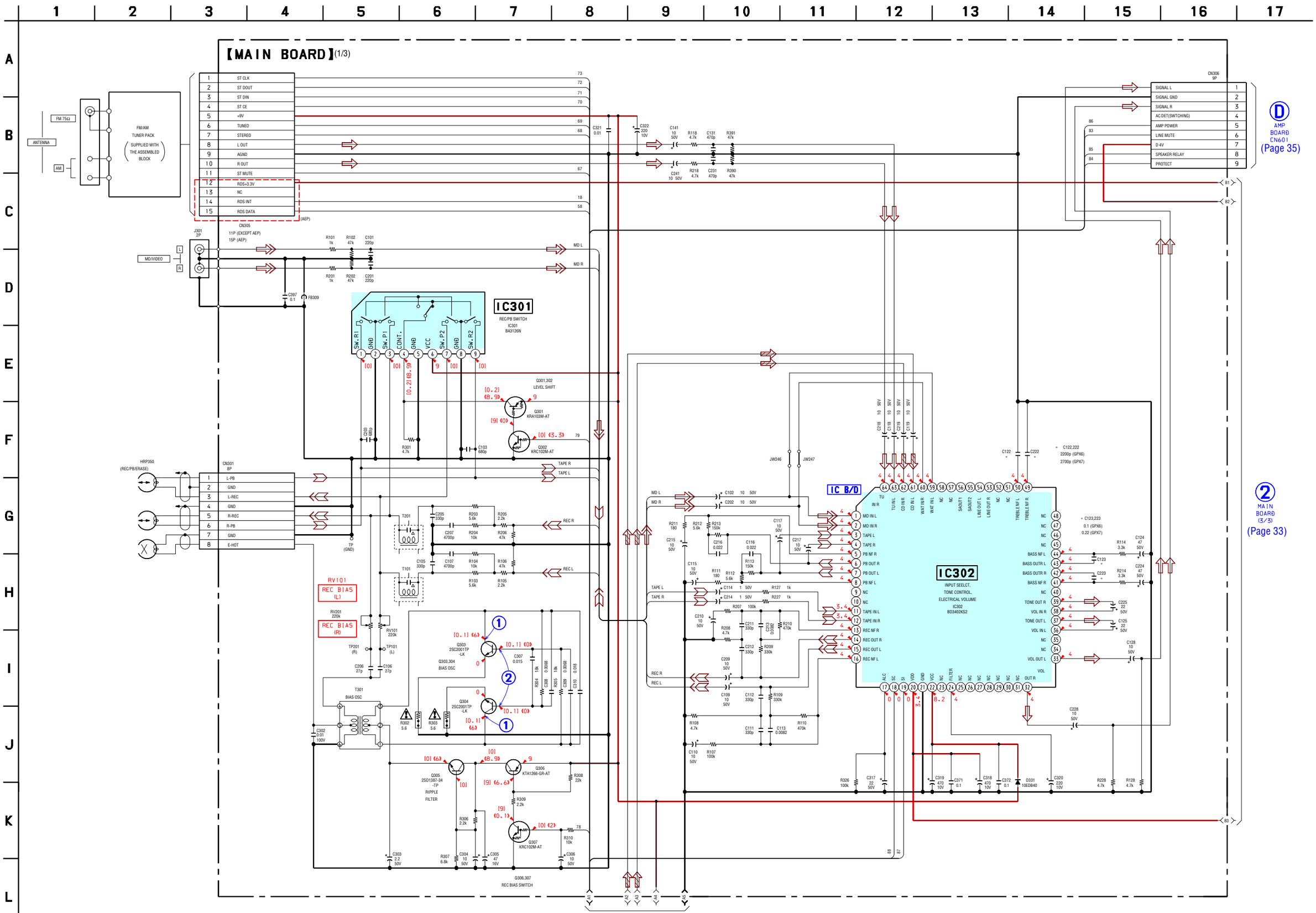
- **Semiconductor Location**

Ref. No.	Location
D301	B-5
D302	E-6
D303	E-6
D304	E-6
D305	E-7
D306	E-6
D307	E-5
D308	E-6
D309	D-6
D310	E-6
D311	E-6
D312	E-6
D313	C-10
D314	E-10
D316	C-9
D317	C-7
D318	C-7
D319	B-6
D325	C-9
D326	C-10
D327	D-9
D328	B-10
D329	B-6
D330	B-6
D331	E-2
IC301	C-4
IC302	E-3
IC304	B-10
IC305	E-6
IC306	D-8
Q102	E-6
Q202	F-6
Q301	C-4
Q302	D-4
Q303	C-2
Q304	B-2
Q305	B-2
Q306	B-1
Q307	C-1
Q308	B-5
Q309	B-6
Q310	B-5
Q311	B-6
Q312	E-6
Q313	E-5
Q314	D-6
Q315	C-10
Q316	C-10
Q317	F-5
Q318	F-5
Q319	C-10
Q320	C-9
Q321	E-9
Q322	C-9
Q323	C-9
Q324	C-10



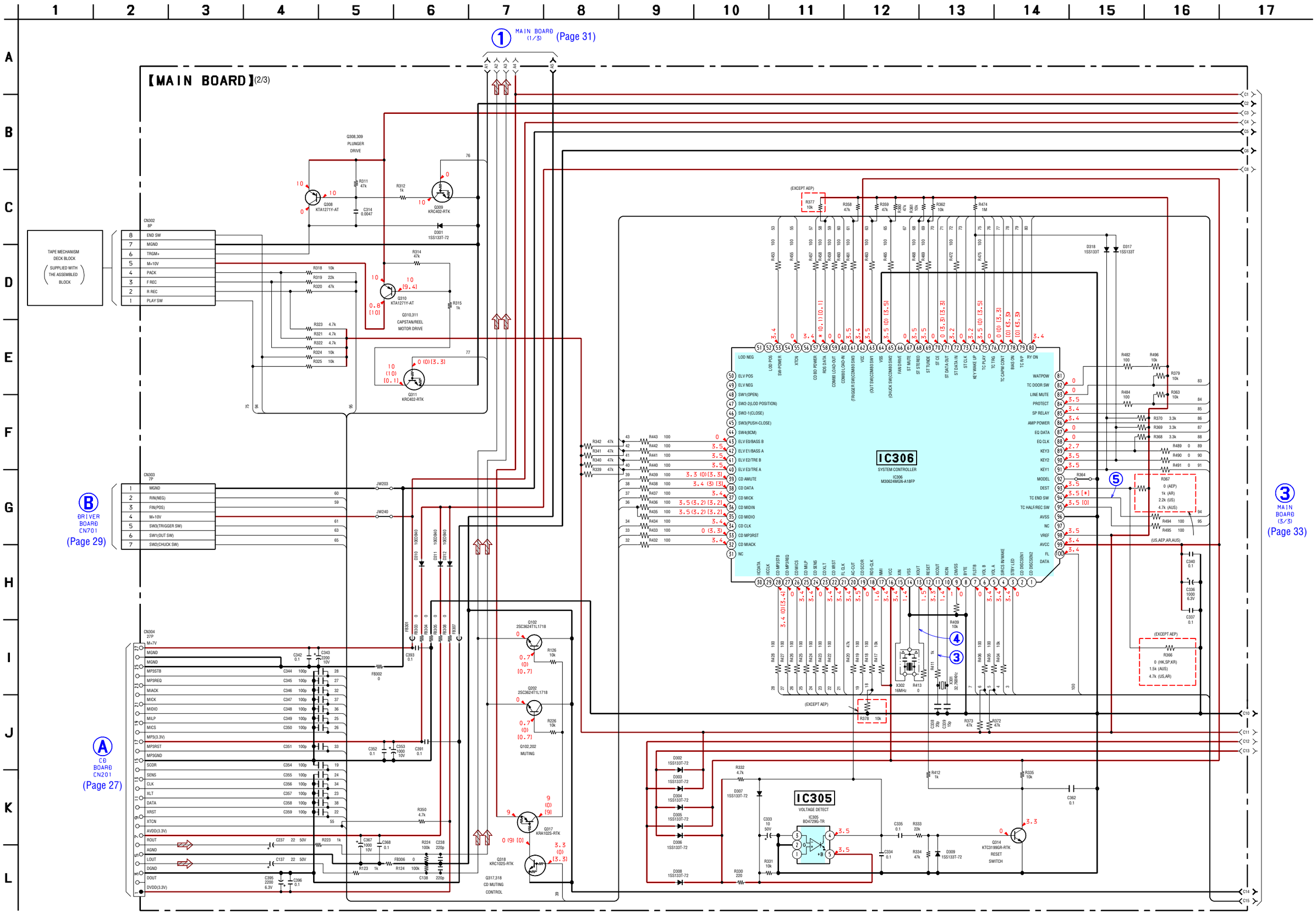
6-10. SCHEMATIC DIAGRAM – MAIN Section (1/3) –

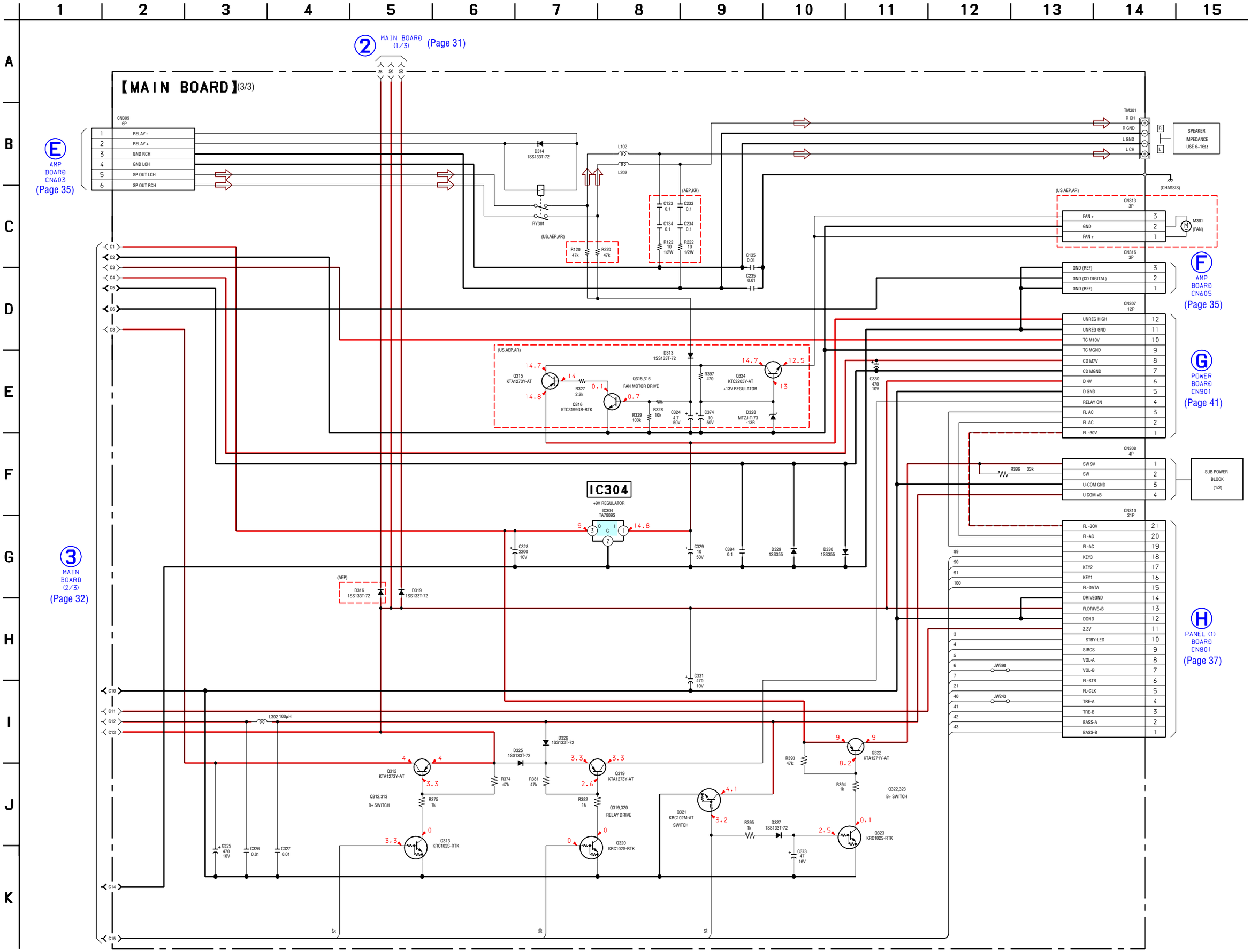
• See page 29 for Waveforms. • See page 42 for IC Block Diagram.



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

6-11. SCHEMATIC DIAGRAM – MAIN Section (2/3) – • See page 29 for Waveforms. • See page 47 for IC Pin Function Description.




【MAIN BOARD】(3/3)
2 MAIN BOARD (1/3) (Page 31)
E AMP BOARD CN603 (Page 35)
CN309 6P
1 RELAY -
2 RELAY +
3 GND RCH
4 GND LCH
5 SP OUT LCH
6 SP OUT RCH
D314 1SS133T-72
RY301
L102
L202
(AEP,KR)
C133 0.1
C233 0.1
C134 0.1
C234 0.1
R122 10 1/2W
R222 10 1/2W
(US,AEP,AR)
R120 47k
R220 47k
C135 0.01
C235 0.01
TM301
R CH
R GND
L GND
L CH
SPEAKER IMPEDANCE USE 6–16Ω
(CHASSIS)
(US,AEP,AR)
CN313 3P
FAN +
GND
FAN +
M301 (FAN)
CN316 3P
GND (REF)
GND (CD DIGITAL)
GND (REF)
F AMP BOARD CN605 (Page 35)
CN307 12P
UNREG HIGH
UNREG GND
TC M10V
TC MGND
CD M7V
CD MGND
D 4V
D GND
RELAY ON
FL AC
FL AC
FL -30V
G POWER BOARD CN901 (Page 41)
(US,AEP,AR)
D313 1SS133T-72
Q315 KTA1273Y-AT
Q316 KTC3199GR-RTK
Q315,316 FAN MOTOR DRIVE
R327 2.2k
R397 470
Q324 KTC3205Y-AT +13V REGULATOR
R329 100k
R328 10k
C324 4.7 50V
C374 10 50V
D328 MTZJ-T-73 -13B
C330 470 10V
CN308 4P
SW 9V
SW
U-COM GND
U COM +B
R396 33k
SUB POWER BLOCK (1/2)
CN310 21P
FL -30V
FL-AC
FL-AC
KEY3
KEY2
KEY1
FL-DATA
DRIVEGND
FLDRIVE+B
DGND
3.3V
STBY-LED
SIRCS
VOL-A
VOL-B
FL-STB
FL-CLK
TRE-A
TRE-B
BASS-A
BASS-B
JW398
JW243
H PANEL (1) BOARD CN801 (Page 37)
IC304
+9V REGULATOR
IC304 TA7809S
C328 2200 10V
C329 10 50V
C394 0.1
D329 1SS355
D330 1SS355
(AEP)
D316 1SS133T-72
D319 1SS133T-72
C331 470 10V
3 MAIN BOARD (2/3) (Page 32)
L302 100µH
C325 470 10V
C326 0.01
C327 0.01
D326 1SS133T-72
D325 1SS133T-72
Q312 KTA1273Y-AT
Q319 KTA1273Y-AT
Q312,313 B+ SWITCH
Q319,320 RELAY DRIVE
R374 47k
R381 47k
R375 1k
R382 1k
Q313 KRC102S-RTK
Q320 KRC102S-RTK
Q321 KRC102M-AT SWITCH
R393 47k
Q322 KTA1271Y-AT
R394 1k
Q322,323 B+ SWITCH
R395 1k
D327 1SS133T-72
C373 47 16V
Q323 KRC102S-RTK
C1
C2
C3
C4
C5
C6
C8
C10
C11
C12
C13
C14
C15

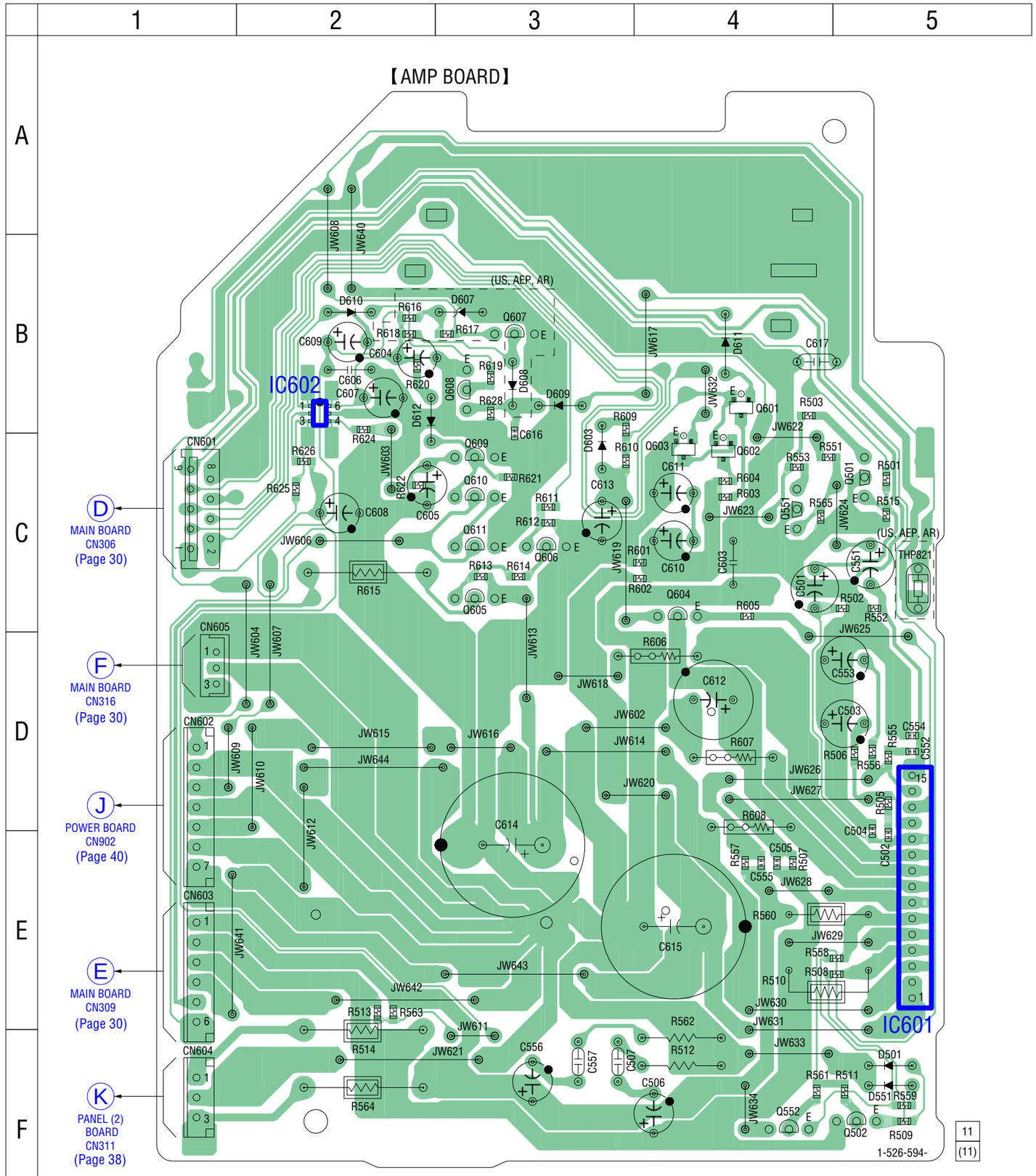
6-13. PRINTED WIRING BOARD – AMP Board –

• See page 25 for Circuit Boards Location.

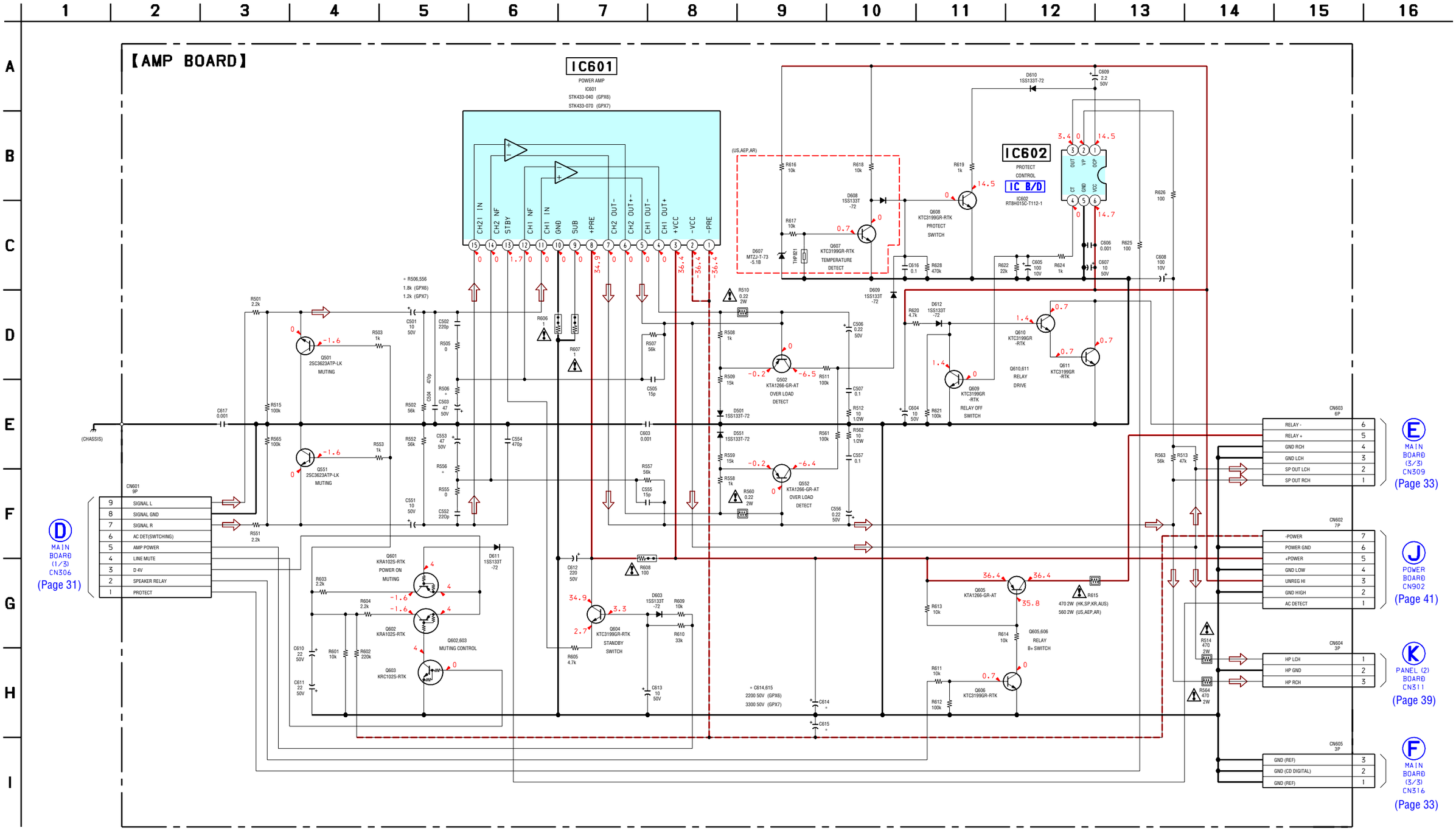
:Uses unleaded solder.

• **Semiconductor Location**

Ref. No.	Location
D501	F-5
D551	F-5
D603	C-3
D607	B-3
D608	B-3
D609	B-3
D610	B-2
D611	B-4
D612	B-2
IC601	E-5
IC602	B-2
Q501	C-5
Q502	F-5
Q551	C-4
Q552	F-4
Q601	B-4
Q602	C-4
Q603	C-4
Q604	C-4
Q605	C-3
Q606	C-3
Q607	B-3
Q608	B-3
Q609	C-3
Q610	C-3
Q611	C-3



6-14. SCHEMATIC DIAGRAM – AMP Board – • See page 42 for IC Block Diagram.



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

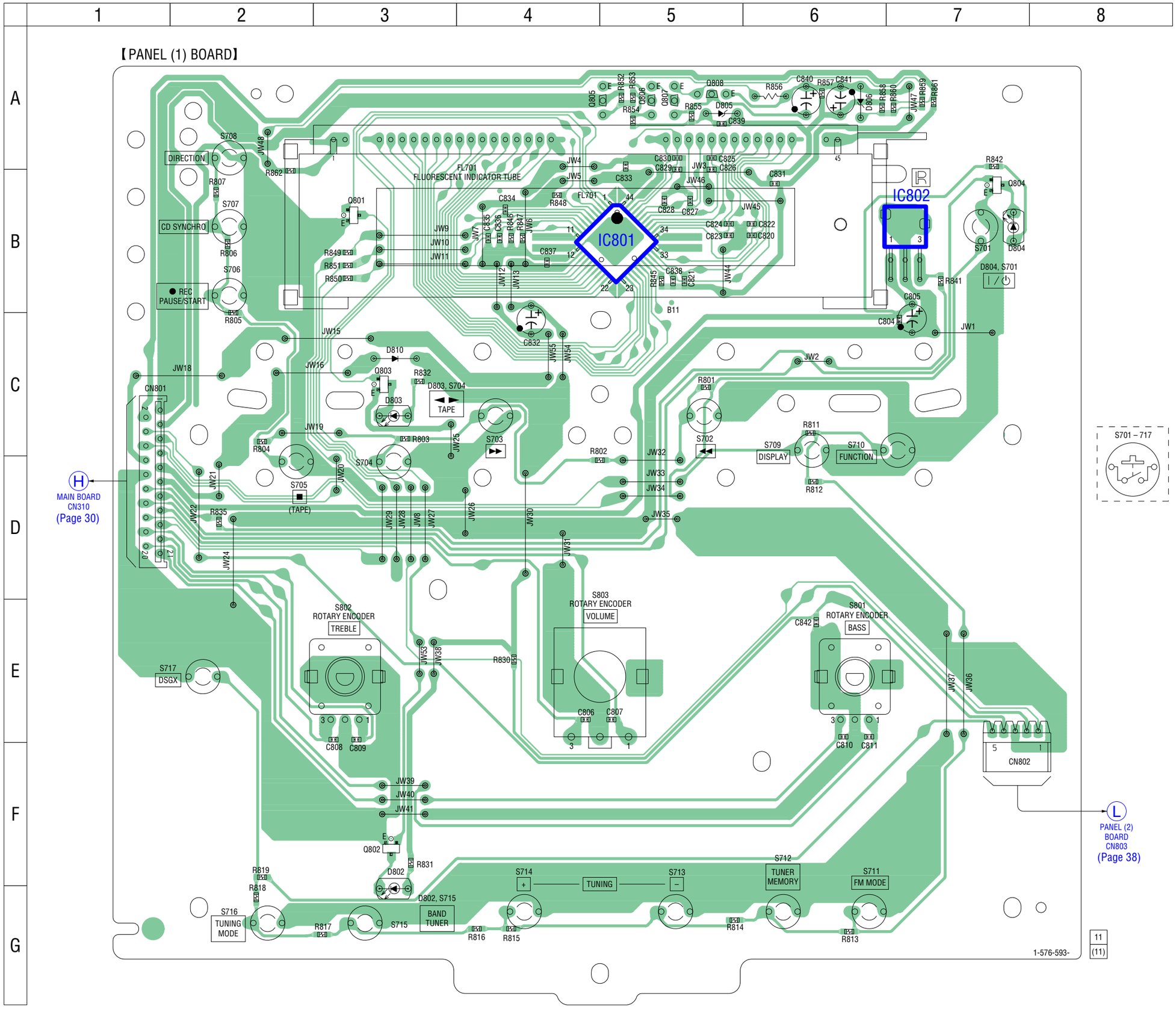
6-15. PRINTED WIRING BOARD – PANEL (1) Board –

• See page 25 for Circuit Boards Location.

:Uses unleaded solder.

- **Semiconductor Location**

Ref. No.	Location
D802	G-3
D803	C-3
D804	B-7
D805	A-5
D806	A-6
D810	C-3
IC801	B-5
IC802	B-7
Q801	B-3
Q802	F-3
Q803	C-3
Q804	B-7
Q805	A-5
Q806	A-5
Q807	A-5
Q808	A-5



6-16. SCHEMATIC DIAGRAM – PANEL (1) Board –

• See page 42 for IC Block Diagram.

【PANEL (1) BOARD】

FL701
FLUORESCENT INDICATOR TUBE

IC801
FL/LED DRIVER
IC801
PT6315

IC802
REMOTE CONTROL
RECEIVER
IC802
RPM7240

S801
ROTARY ENCODER
BASS

S802
ROTARY ENCODER
TREBLE

S803
ROTARY ENCODER
VOLUME

IC B/D

Q801-803
LED DRIVE

Q804
KRC102S-RTK
LED DRIVE

Q807
KTA1266-GR
-AT

Q806
KTA1266-GR
-AT

Q805
KTA1266-GR
-AT

Q808
KTA1266-GR
-AT
CURRENT LIMIT

Q805-807
-30V REGULATOR

D804
SLR325VC-N-T32

D805
MTZJ-T-73-33B

D806
MTZJ-T-73
-5.1B

D802
SLR325DC-P
-T32
BAND
TUNER

D803
SLR325DC-P
-T32
TAPE

D810
10EDB40
-TB3

DIRECTION
CD SYNCHRO
REC
PAUSE/START
(TAPE)
TAPE
TUNING MODE
BAND TUNER
TUNING
TUNER MEMORY
FM MODE
FUNCTION
DISPLAY
DSGX

CN801
21P

FL -30V	21
FL-AC	20
FL-AC	19
KEY3	18
KEY2	17
KEY1	16
FL-DATA	15
DRIVEGND	14
FLVDRIVE+B	13
DGND	12
3.3V	11
STBY-LED	10
SIRCS	9
VOLA	8
VOLB	7
FL-STB	6
FL-CLK	5
TREBLEA	4
TREBLEB	3
BASSA	2
BASSB	1

(H) MAIN BOARD (3/3) CN310 (Page 33)

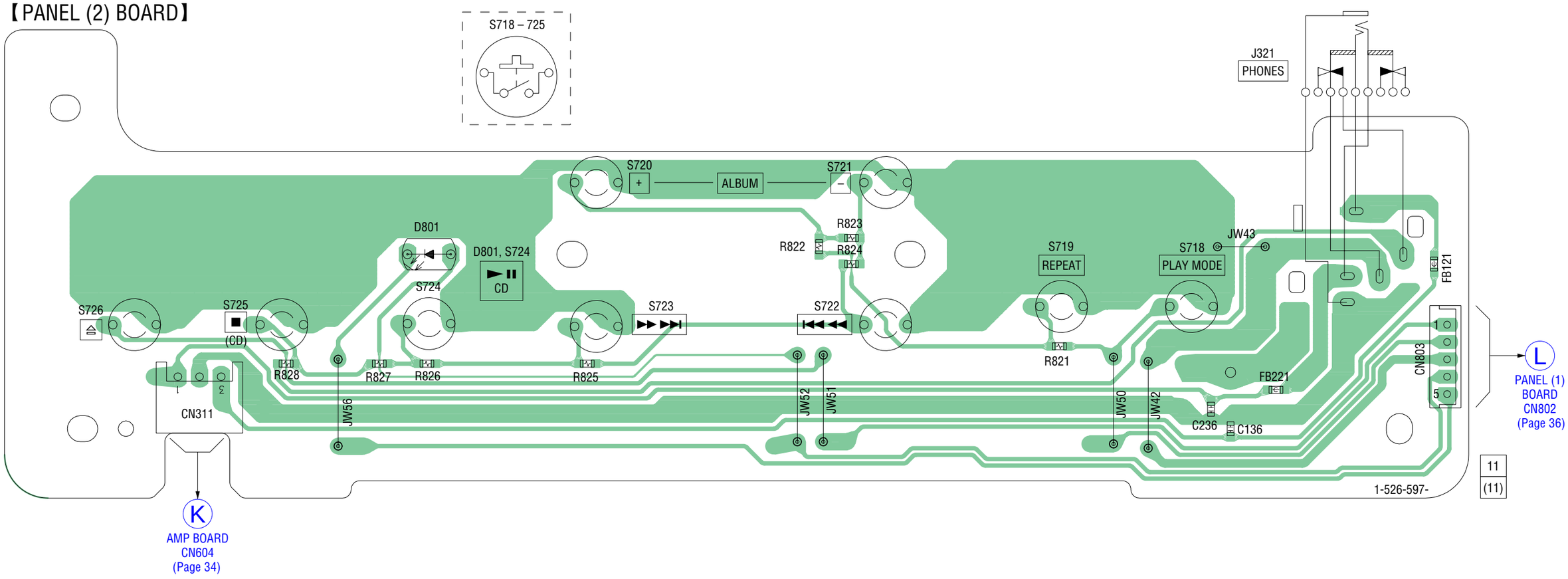
CN802
5P

KEY2	5
KEY3	4
GND	3
LED-CD+	2
LED-CD-	1

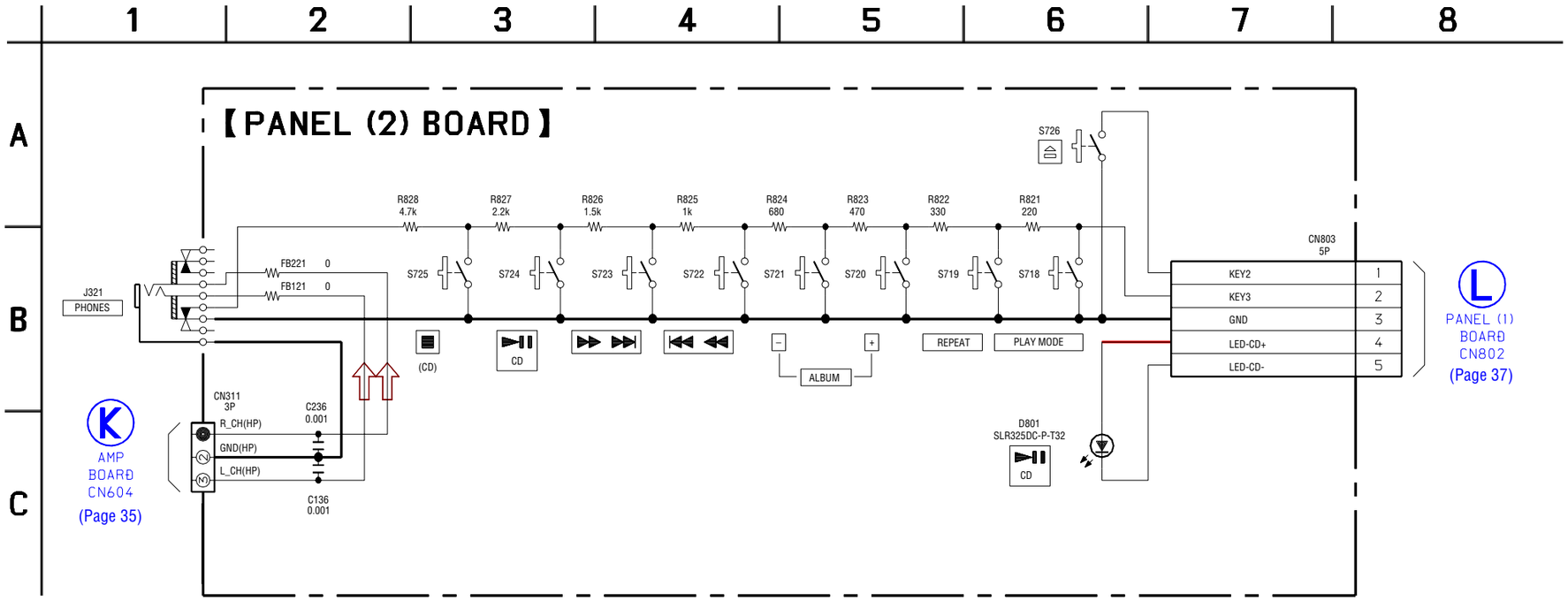
(L) PANEL (2) BOARD CN803 (Page 39)

6-17. PRINTED WIRING BOARD – PANEL (2) Board – • See page 25 for Circuit Boards Location. **:Uses unleaded solder.**

【PANEL (2) BOARD】



6-18. SCHEMATIC DIAGRAM – PANEL (2) Board –



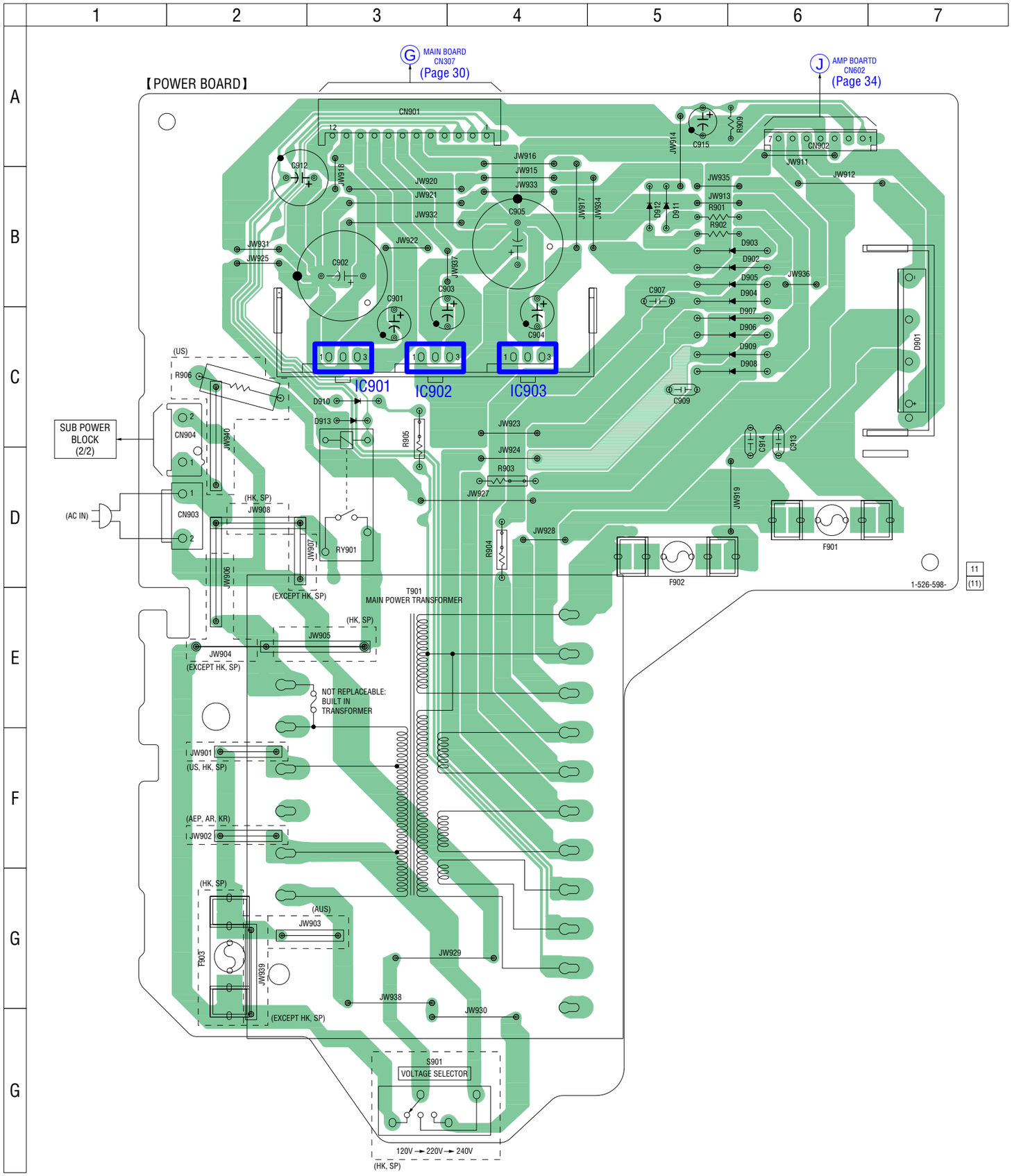
6-19. PRINTED WIRING BOARD – POWER Board –

• See page 25 for Circuit Boards Location.

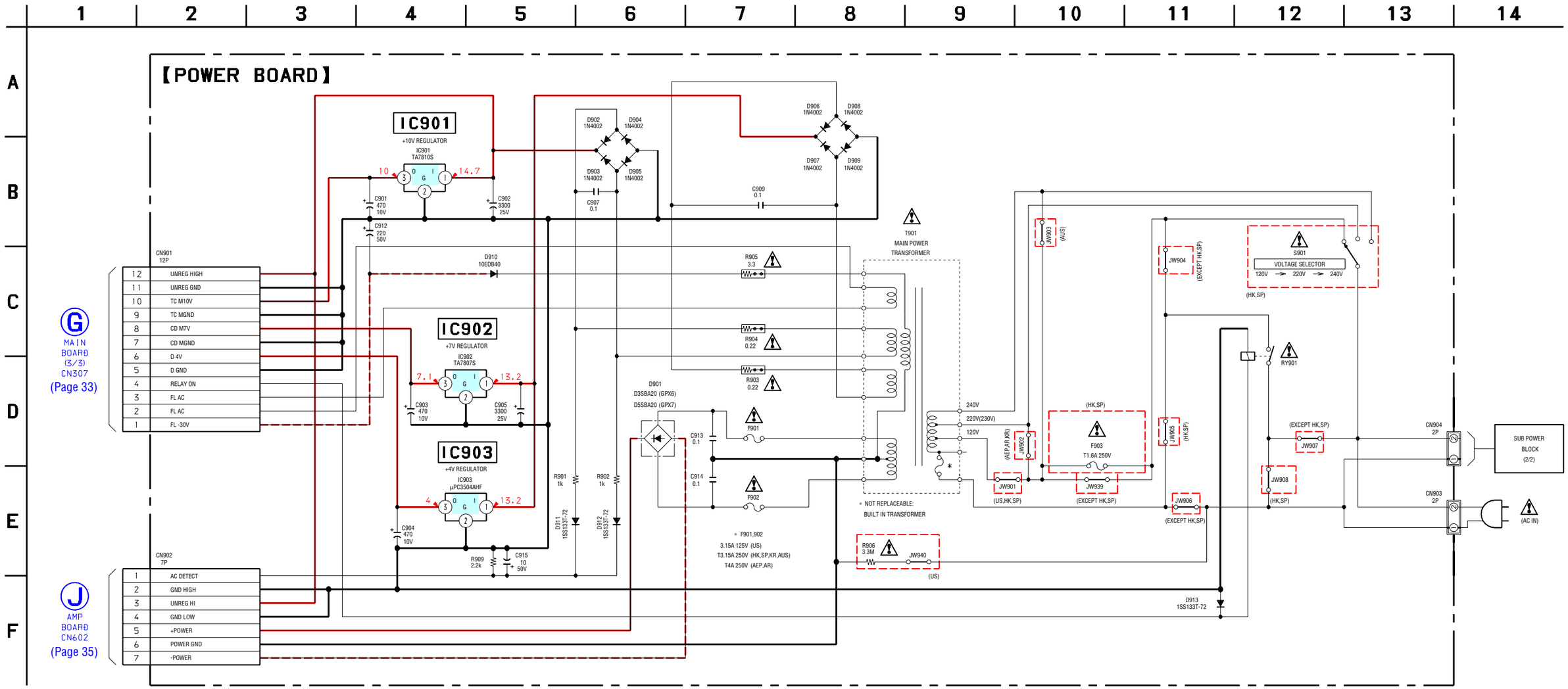
:Uses unleaded solder.

- **Semiconductor Location**

Ref. No.	Location
D901	C-7
D902	B-6
D903	B-6
D904	B-6
D905	B-6
D906	C-6
D907	C-6
D908	C-6
D909	C-6
D910	C-3
D911	B-5
D912	B-5
D913	C-3
IC901	C-3
IC902	C-3
IC903	C-4



6-20. SCHEMATIC DIAGRAM – POWER Board –

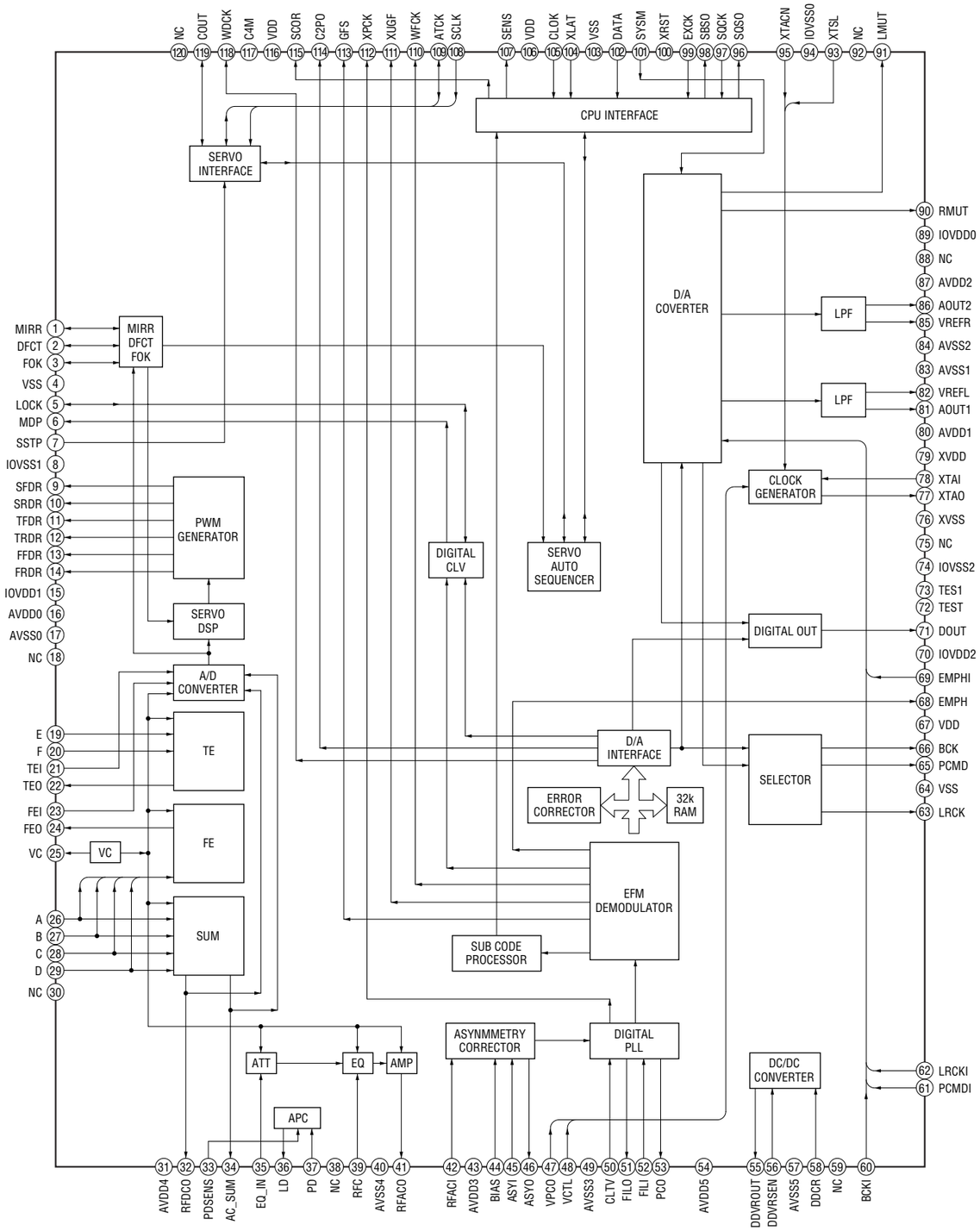


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

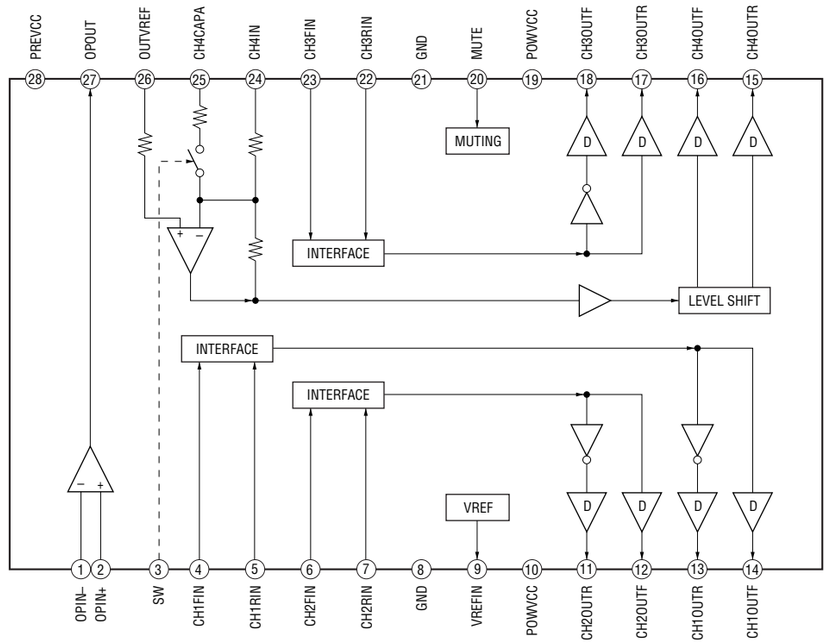
- **IC Block Diagrams**

– BD Board –

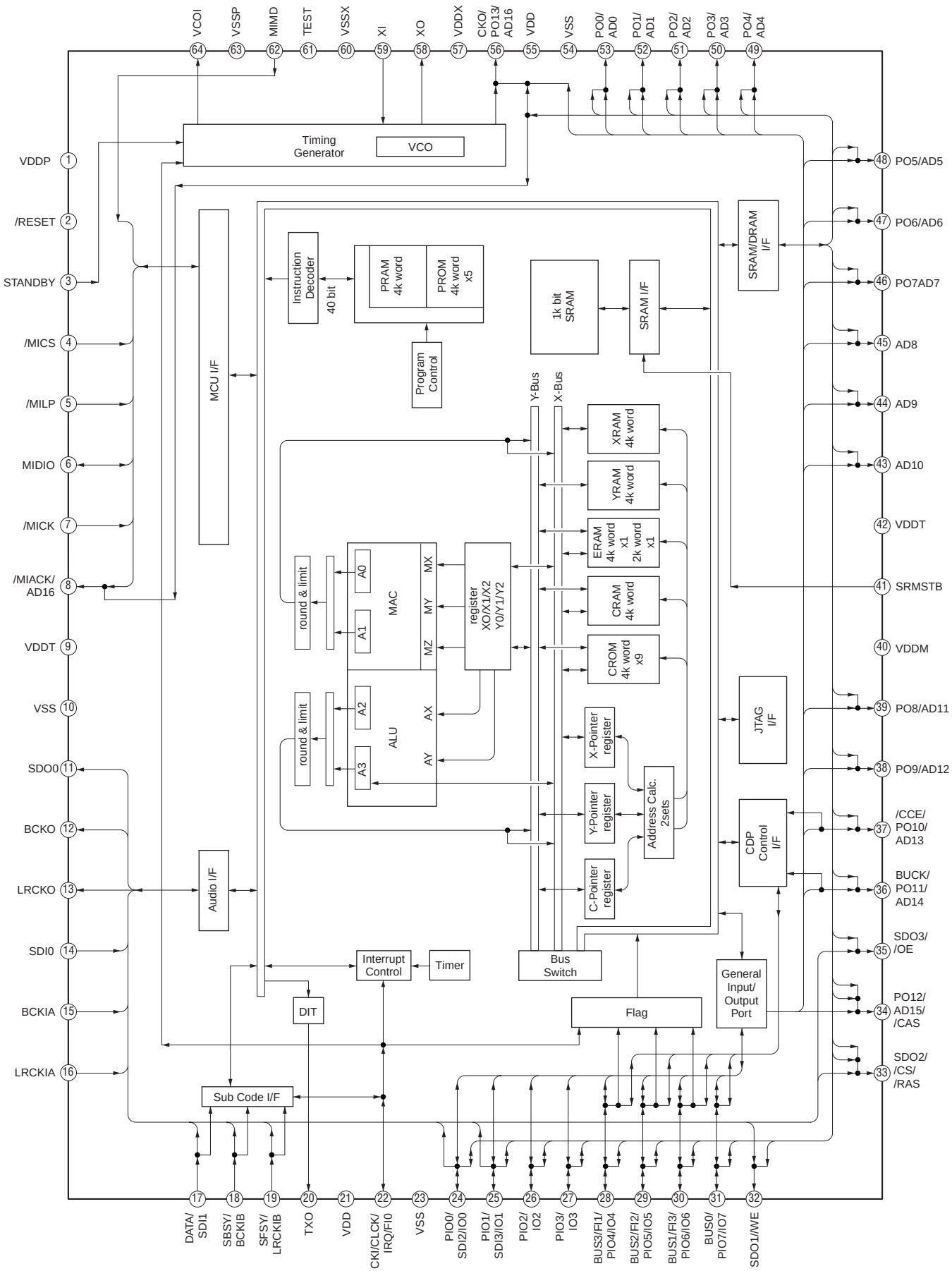
IC101 CXD3059AR



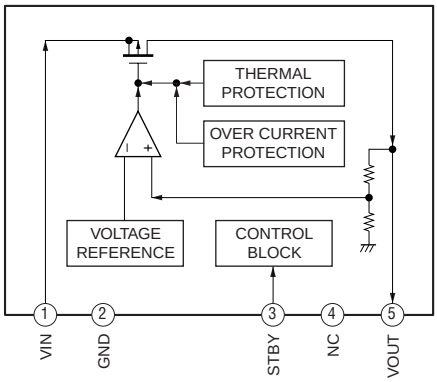
IC251 BA5947FM



IC301 TC94A34FG-002

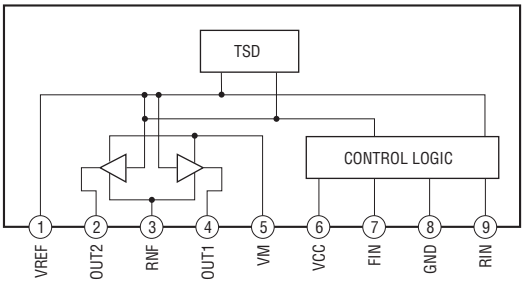


IC303 BH15FB1WG



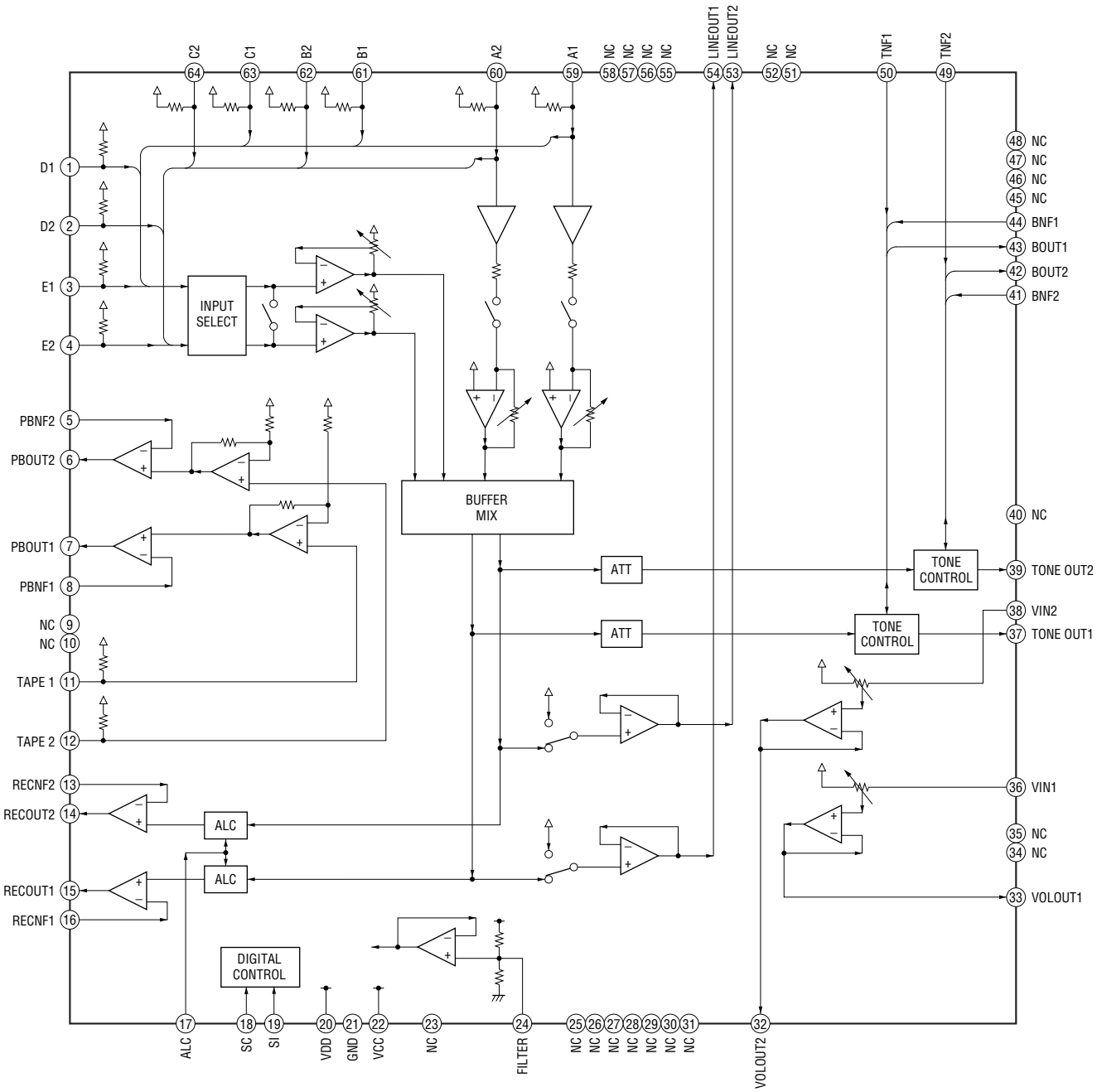
– DRIVER Board –

IC701 BA6956AN



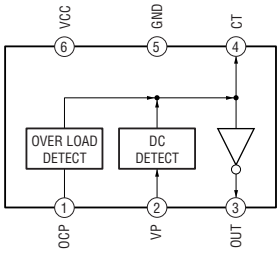
– MAIN Board –

IC302 BD3402KS2



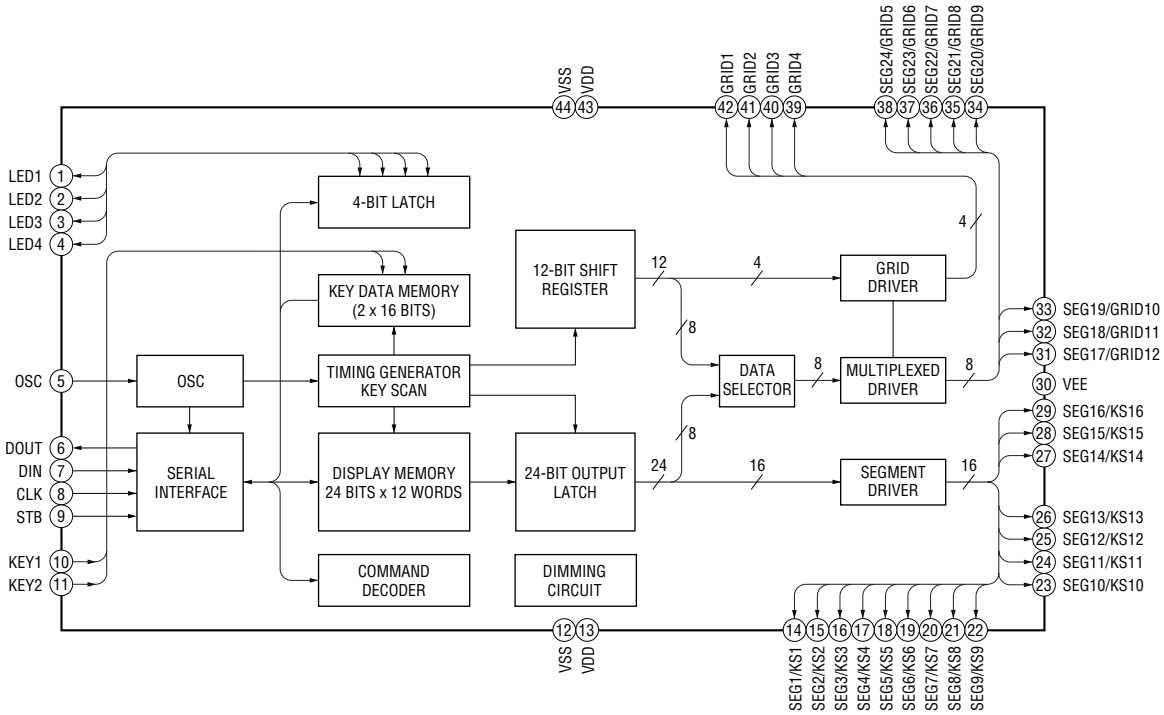
– AMP Board –

IC602 RT8H015C-T112-1



– PANEL Board –

IC801 µPD16315GB-3BS



- **IC Pin Function Description**

MAIN BOARD IC306 M3062CMEN-A00FPU0 (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	CD DISCSENS 2	I	Not used
2	CD DISCSENS 1	I	Not used
3	STBY LED	O	LED drive signal output terminal (power)
4	SIRCS IN/WAKE	I	SIRCS signal input terminal
5, 6	VOL A, VOL B	I	Jog dial pulse input terminal (volume)
7	FLSTB	O	Serial data read strobe signal output to the FL/LED driver
8	BYTE	I	External data bus width select signal input terminal
9	CNVSS	—	Ground terminal
10	XCIN	I	Sub system clock input terminal (32.768 kHz)
11	XCOUT	O	Sub system clock output terminal (32.768 kHz)
12	RESET	I	System reset signal input terminal "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it changes to "H"
13	XOUT	O	Main system clock output terminal (16 MHz)
14	VSS	—	Ground terminal
15	XIN	I	Main system clock input terminal (16 MHz)
16	VCC	—	Power supply terminal (+3.3V)
17	NMI	I	Non-maskable interrupt signal input terminal Not used
18	RDS-CLK	I	RDS serial data transfer clock signal input terminal (AEP only)
19	CD SCOR	I	Subcode Q data request signal input terminal
20	AC-CUT	I	Power down detection signal input terminal "L": power down
21	FL CLK	O	Serial data transfer clock signal output to the FL/LED driver
22	CD XRST	O	System reset signal output to the CD servo block
23	CD XLT	O	Latch pulse signal output to the CD servo block
24	CD SENS	I	Internal status (SENSE) input from the CD DSP
25	CD MILP	O	Serial data latch pulse output to the MP3 decoder
26	CD MICS	O	Chip select signal output to the MP3 decoder
27	CD MP3REQ	I	Data transfer request signal input from the MP3 decoder
28	CD MP3STB	O	Standby signal output to the MP3 decoder
29	IICCLK	I/O	IIC data transfer clock signal input and output Not used
30	IICDATA	I/O	IIC two-way data bus Not used
31	NC	O	Not used
32	CD MIACK	I	Acknowledge signal input from the MP3 decoder
33	CD MP3RST	O	Reset signal output to the MP3 decoder
34	CD CLK	O	Serial data transfer clock signal output to the CD DSP
35	CD MIDIO	O	Serial data output to the MP3 decoder
36	CD MIDIN	I	Serial data input from the MP3 decoder
37	CD MICK	O	Serial data transfer clock signal output to the MP3 decoder
38	CD DATA	O	Serial data output to the CD DSP
39	CD AMUTE	O	CD muting on/off control signal output terminal
40	ELV E3/TRE A	I	Jog dial pulse input from the rotary encoder (treble)
41	ELV E2/TRE B	I	Jog dial pulse input from the rotary encoder (treble)
42	ELV E1/BASS A	I	Jog dial pulse input from the rotary encoder (bass)
43	ELV E0/BASS B	I	Jog dial pulse input from the rotary encoder (bass)
44	SW4 (8CM)	I	CD disc size detection (8cm/12cm) signal input terminal Not used

Pin No.	Pin Name	I/O	Description
45	SW3 (PUSH-CLOSE)	I	CD push-close switch input terminal Not used
46	SW2-1 (CLOSE)	I	CD close switch input terminal Not used
47	SW2-2 (LOD POSITION)	I	CD loading position switch input terminal Not used
48	SW1 (OPEN)	I	CD open switch input terminal Not used
49	ELV NEG	O	Elevator up/down motor control signal output Not used
50	ELV POS	O	Elevator up/down motor control signal output Not used
51	LOD NEG	O	Loading motor control signal output Not used
52	LOD POS	O	Loading motor control signal output Not used
53	SW-POWER	O	Sub power block on/off control signal output terminal
54	—	O	Not used
55	XTCN	O	Oscillator control signal output to the CD DSP
56	—	O	Not used
57	CD BD POWER	O	Power on/off control signal output for CD block
58	RDS DATA	I	RDS serial data input terminal (AEP only)
59	CDM80 LOAD-OUT	O	Loading motor control signal output (loading out direction)
60	CDM80 LOAD-IN	O	Loading motor control signal output (loading in direction)
61	(TRIGGER SW) CDM80 SW3	I	Trigger switch input terminal “L”: switch on
62	VCC	—	Power supply terminal (+3.3V)
63	(OUT SW) CDM80 SW1	I	Out switch input terminal “L”: switch on
64	VSS	—	Ground terminal
65	(CHUCK SW) CDM80 SW2	I	Chuck switch input terminal “L”: switch on
66	FAN DRIVE	O	Fan motor drive signal output terminal Not used
67	ST MUTE	O	Tuner muting on/off control signal output terminal
68	ST STEREO	I	FM stereo detection signal input from the tuner unit “L”: stereo
69	ST TUNED	I	Tuning detection signal input from the tuner unit “L”: tuned
70	ST CE	O	Chip enable signal output to the FM/AM tuner unit
71	ST DATA OUT	O	Serial data output to the FM/AM tuner unit
72	ST DATA IN	I	Serial data input from the FM/AM tuner unit
73	ST CLK	O	Serial data transfer clock signal output to the FM/AM tuner unit
74	KEY WAKE UP	I	System wake up signal input terminal in the standby status
75	TC PLAY	I	Tape play switch input terminal
76	TC TRG	O	Plunger driver signal output terminal “L”: plunger on
77	TC CAPM CONT	O	Capstan/reel motor drive signal output terminal “L”: forward, “H”: reverse
78	BIAS ON	O	REC bias on/off control signal output terminal “H”: REC bias on
79	TC R/P	O	PB/REC switching control signal output terminal “L”: PB
80	RY ON	O	Relay drive signal output for main power supply “H”: power on
81	WATPOW	O	Not used
82	TC DOOR SW	I	Tape deck lid open/close detection signal input terminal Not used
83	LINE MUTE	O	Line muting on/off control signal output terminal “H”: muting on

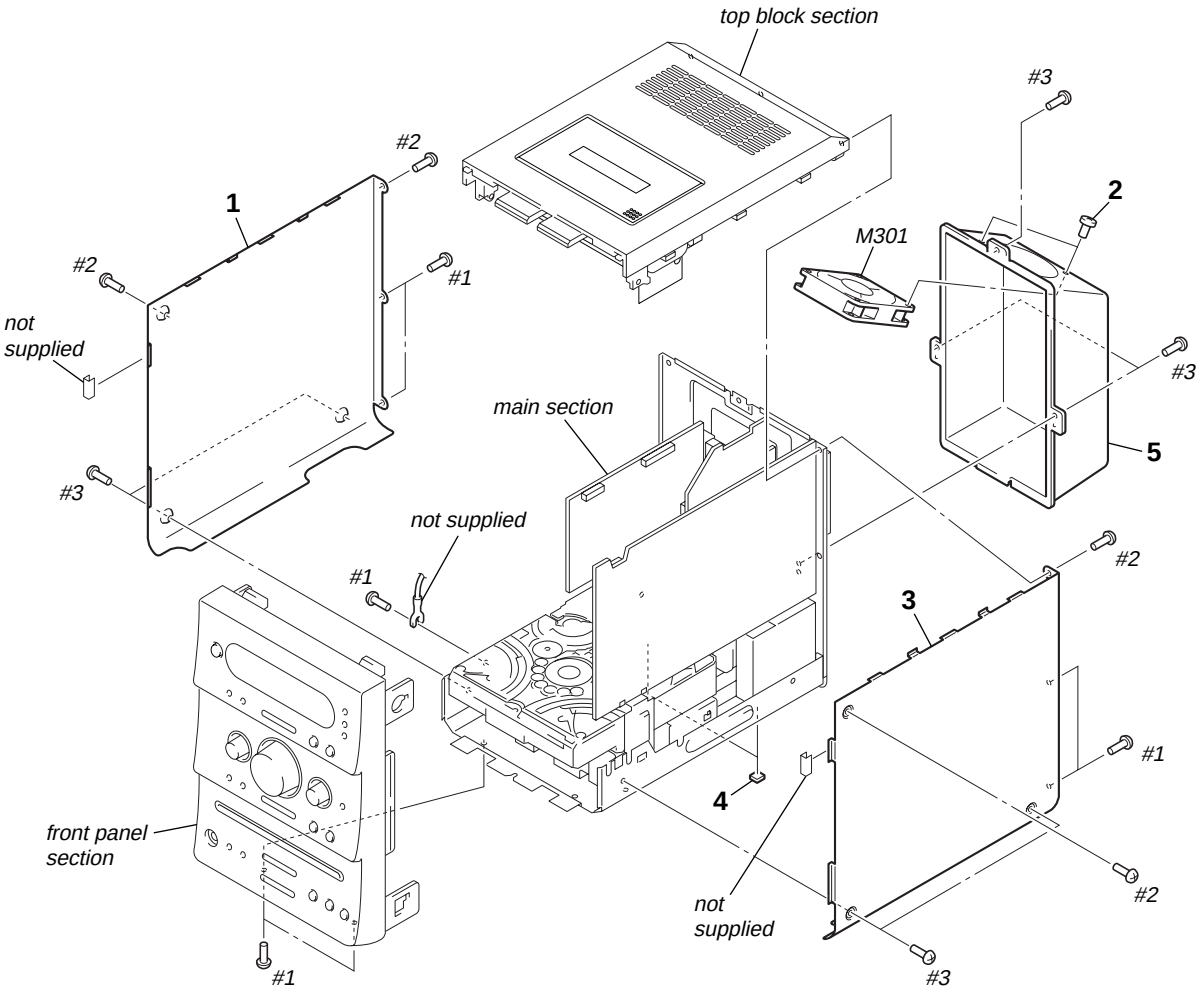
Pin No.	Pin Name	I/O	Description
84	PROTECT	I	Protect signal input from the amplifier circuit "L": protect
85	SP RELAY	O	Speaker on/off relay drive signal output terminal "L": speaker off
86	AMP POWER	O	AMP muting on/off control signal output terminal "H": AMP on
87	EQ DATA	O	Serial data output to the electrical volume
88	EQ CLK	O	Serial data transfer clock signal output to the electrical volume
89 to 91	KEY3 to KEY1	I	Front panel key or headphone detection input terminal (A/D input)
92	MODEL	I	Setting terminal for the model type
93	DEST	I	Setting terminal for the destination
94	TC END SW	I	End switch detection from tape deck block
95	TC HALF/ REC SW	I	Half/REC switch detection from tape deck block
96	AVSS	—	Ground terminal
97	NC	O	Not used
98	VREF	I	Reference voltage (+3.3V) input terminal
99	AVCC	—	Power supply terminal (+3.3V)
100	FL DATA	O	Serial data output to the FL/LED driver

SECTION 7
EXPLODED VIEWS

NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Abbreviation
  AR : Argentina model
  AUS : Australian model
  HK : Hong Kong model
  KR : Korean model
  SP : Singapore model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

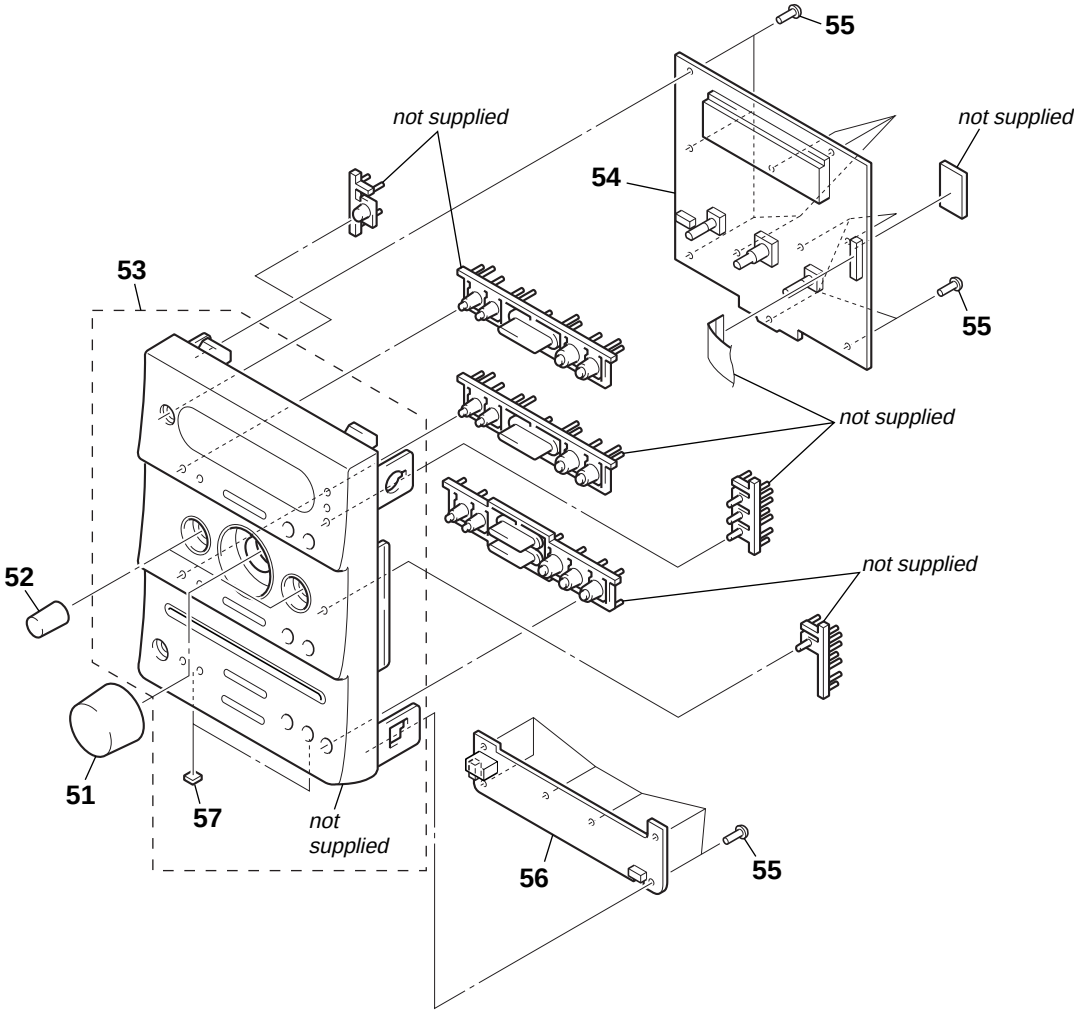
7-1. SIDE PLATES SECTION



Ref. No.	Part No.	Description	Remark
1	4-251-905-01	PLATE (L), SIDE	
2	4-671-016-01	SCREW (FAN) (US, AEP, AR)	
3	4-251-906-01	PLATE (R), SIDE	
4	4-247-752-01	RUBBER, FOOT	
5	4-251-908-01	COVER, HEAT SINK (GPX7)	
5	4-251-908-11	COVER, HEAT SINK (GPX6: HK, SP, KR, AUS)	

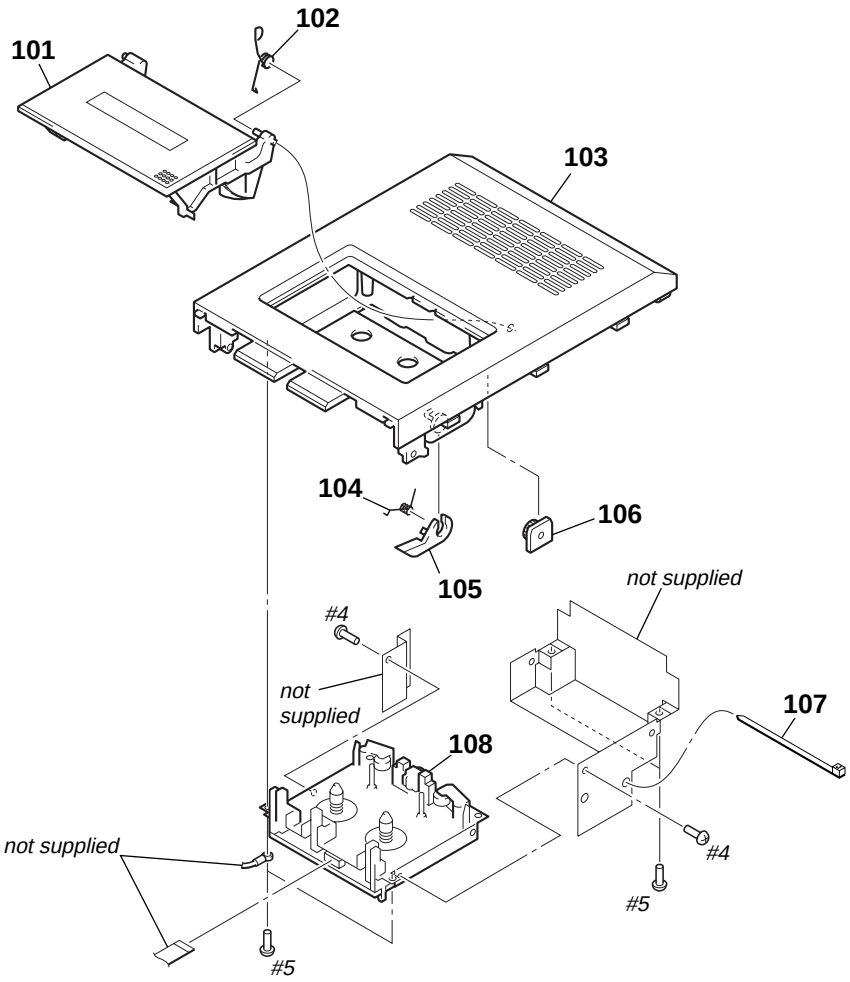
Ref. No.	Part No.	Description	Remark
5	4-251-908-31	COVER, HEAT SINK (GPX6: US)	
M301	1-787-103-11	FAN, DC (US, AEP, AR)	
#1	7-685-871-01	SCREW +BVTT 3X6 (S)	
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#3	7-685-872-09	SCREW +BVTT 3X8 (S)	

7-2. FRONT PANEL SECTION



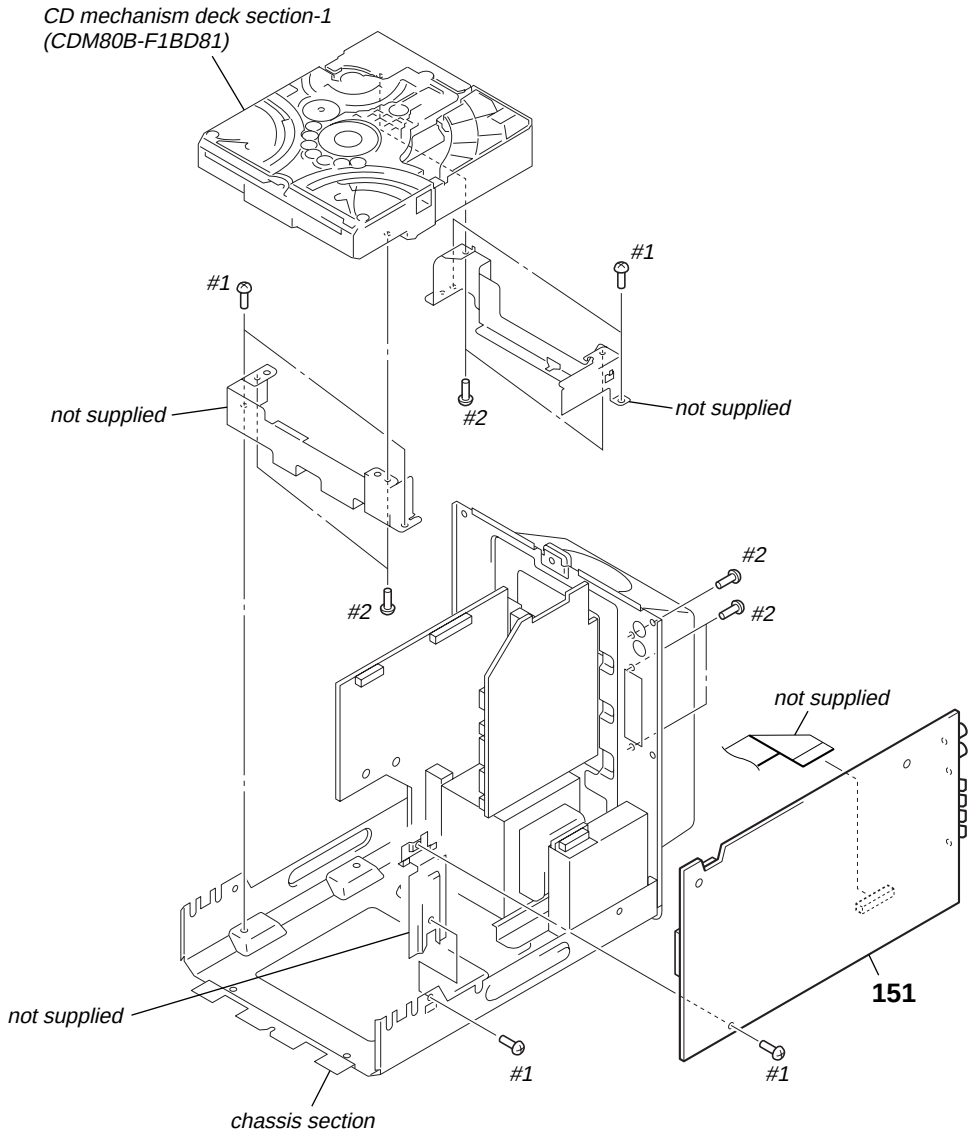
Ref. No.	Part No.	Description	Remark
51	4-251-909-01	KNOB, VOLUME	
52	4-251-910-01	KNOB, B/T	
53	X-2021-488-1	PANEL SUB ASSY, FRONT (AR)	
53	X-2021-539-1	FRONT PANEL ASSY (HK, SP, KR, AUS)	
53	X-4956-090-1	PANEL SUB ASSY, FRONT (AEP)	
53	X-4956-426-1	FRONT PANEL ASSY (US)	
54	A-4750-228-A	PANEL (1) BOARD, COMPLETE	
55	4-951-620-01	SCREW (2.6X8), +BVTP	
56	A-4750-229-A	PANEL (2) BOARD, COMPLETE	
57	4-247-752-01	RUBBER, FOOT	

7-3. TOP BLOCK SECTION



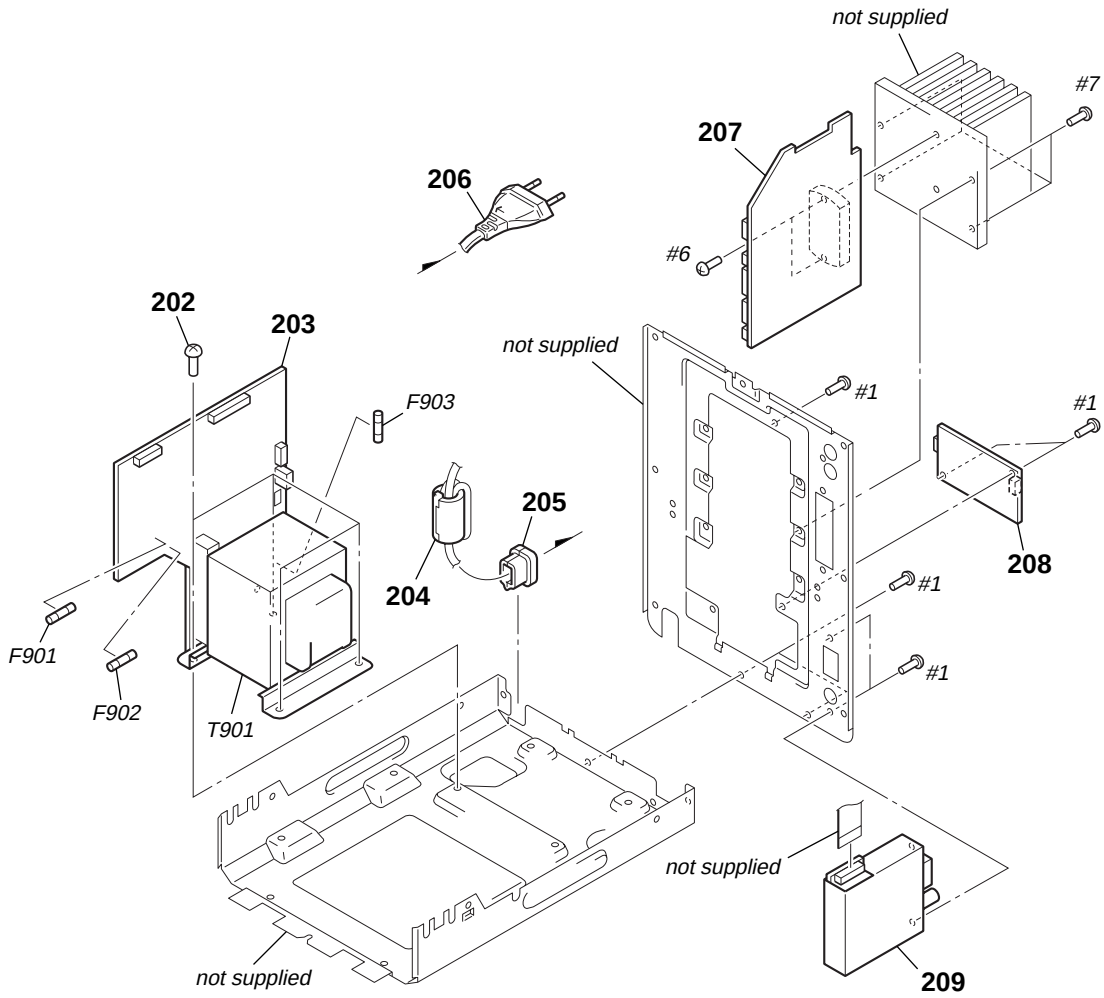
Ref. No.	Part No.	Description	Remark
101	X-4956-091-1	HOLDER ASSY, CASSETTE	
102	4-251-899-01	SPRING, CASSETTE	
103	4-251-898-01	CABINET, TOP (EXCEPT US)	
103	4-251-898-11	CABINET, TOP (US)	
104	4-231-836-01	SPRING (HEART CAM-A)	
105	4-231-824-01	CAM (A), HEART	
106	4-224-104-41	DAMPER	
107	3-701-748-00	CLAMP	
108	1-796-351-41	MECHANISM, SIGNAL CASSETTE	(CMAL1Z234A)
#4	7-685-862-09	SCREW +BVTT 2.6X6 (S)	
#5	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	

7-4. MAIN SECTION



Ref. No.	Part No.	Description	Remark
151	A-1052-489-A	MAIN BOARD, COMPLETE (US)	
151	A-1059-491-A	MAIN BOARD, COMPLETE (HK, SP)	
151	A-1059-528-A	MAIN BOARD, COMPLETE (KR)	
151	A-1059-562-A	MAIN BOARD, COMPLETE (AUS)	
151	A-1061-983-A	MAIN BOARD, COMPLETE (AR)	
151	A-4751-274-A	MAIN BOARD, COMPLETE (AEP)	
#1	7-685-871-01	SCREW +BVTT 3X6 (S)	
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	

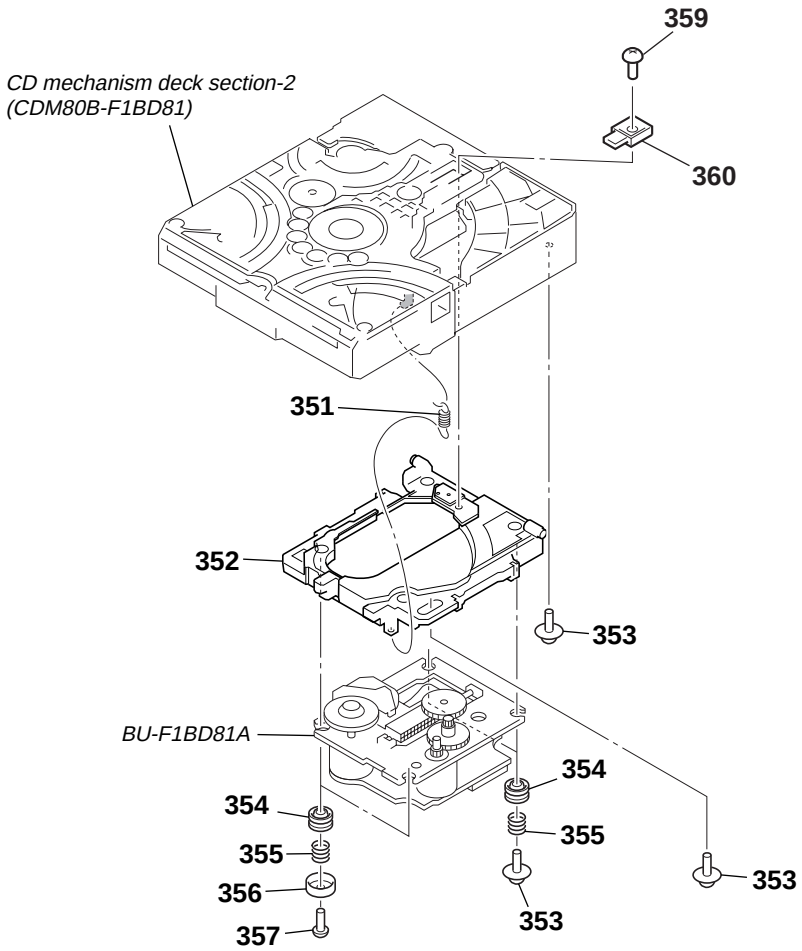
7-5. CHASSIS SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

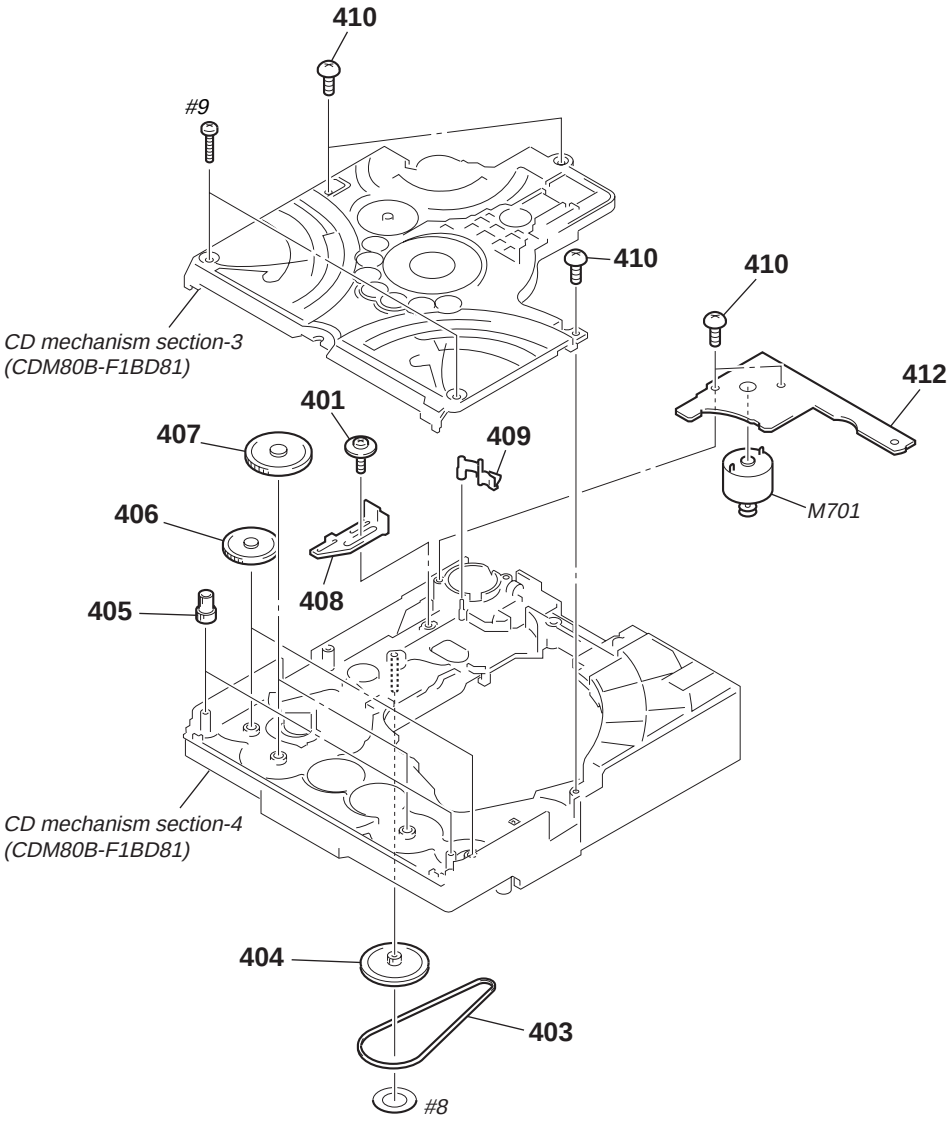
Ref. No.	Part No.	Description	Remark
202	4-900-386-01	SCREW	
203	A-1052-488-A	POWER BOARD, COMPLETE (US)	
203	A-1059-498-A	POWER BOARD, COMPLETE (HK, SP)	
203	A-1059-548-A	POWER BOARD, COMPLETE (KR)	
203	A-1059-564-A	POWER BOARD, COMPLETE (AUS)	
203	A-1061-979-A	POWER BOARD, COMPLETE (AR)	
203	A-4750-219-A	POWER BOARD, COMPLETE (AEP)	
204	1-500-386-11	FILTER, CLAMP (FERRITE CORE)	
205	3-703-244-00	BUSHING (2104), CORD	
⚠206	1-769-079-23	CORD, POWER (KR)	
⚠206	1-769-744-52	CORD, POWER (HK, SP, AEP)	
⚠206	1-775-790-12	CORD, POWER (AUS)	
⚠206	1-783-531-22	CORD, POWER (US)	
⚠206	1-829-387-11	CORD, POWER (AR)	
207	A-1052-493-A	AMP BOARD, COMPLETE (US)	
207	A-1059-502-A	AMP BOARD, COMPLETE (HK, SP, KR, AUS)	
207	A-1061-981-A	AMP BOARD, COMPLETE (AR)	
207	A-4751-271-A	AMP BOARD, COMPLETE (AEP)	
208	1-468-738-11	REGULATOR, SWITCHING	
209	1-693-625-11	TUNER (FM/AM) (US)	
209	1-693-626-11	TUNER (FM/AM) (AEP)	
209	1-693-628-11	TUNER (FM/AM) (HK, SP, AUS, AR)	
209	1-693-629-11	TUNER (FM/AM) (KR)	
⚠F901	1-533-451-12	FUSE, GLASS TUBE (DIA. 5) (3.15A/125V)	(US)
⚠F901	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15A/250V)	(HK, SP, KR, AUS)
⚠F901	1-533-471-12	FUSE, GLASS TUBE (DIA. 5) (T4A/250V)	(AEP, AR)
⚠F902	1-533-451-12	FUSE, GLASS TUBE (DIA. 5) (3.15A/125V)	(US)
⚠F902	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15A/250V)	(HK, SP, KR, AUS)
⚠F902	1-533-471-12	FUSE, GLASS TUBE (DIA. 5) (T4A/250V)	(AEP, AR)
⚠F903	1-533-467-12	FUSE, GLASS TUBE (DIA. 5) (T1.6A/250V)	(HK, SP)
⚠T901	1-443-197-11	TRANSFORMER, POWER (AEP, AR)	
⚠T901	1-443-204-11	TRANSFORMER, POWER (US)	
⚠T901	1-443-205-11	TRANSFORMER, POWER (HK, SP, KR, AUS)	
#1	7-685-871-01	SCREW +BVTT 3X6 (S)	
#6	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	
#7	7-685-874-09	SCREW +BVTT 3X12 (S)	

7-6. CD MECHANISM DECK SECTION-1 (CDM80B-F1BD81)



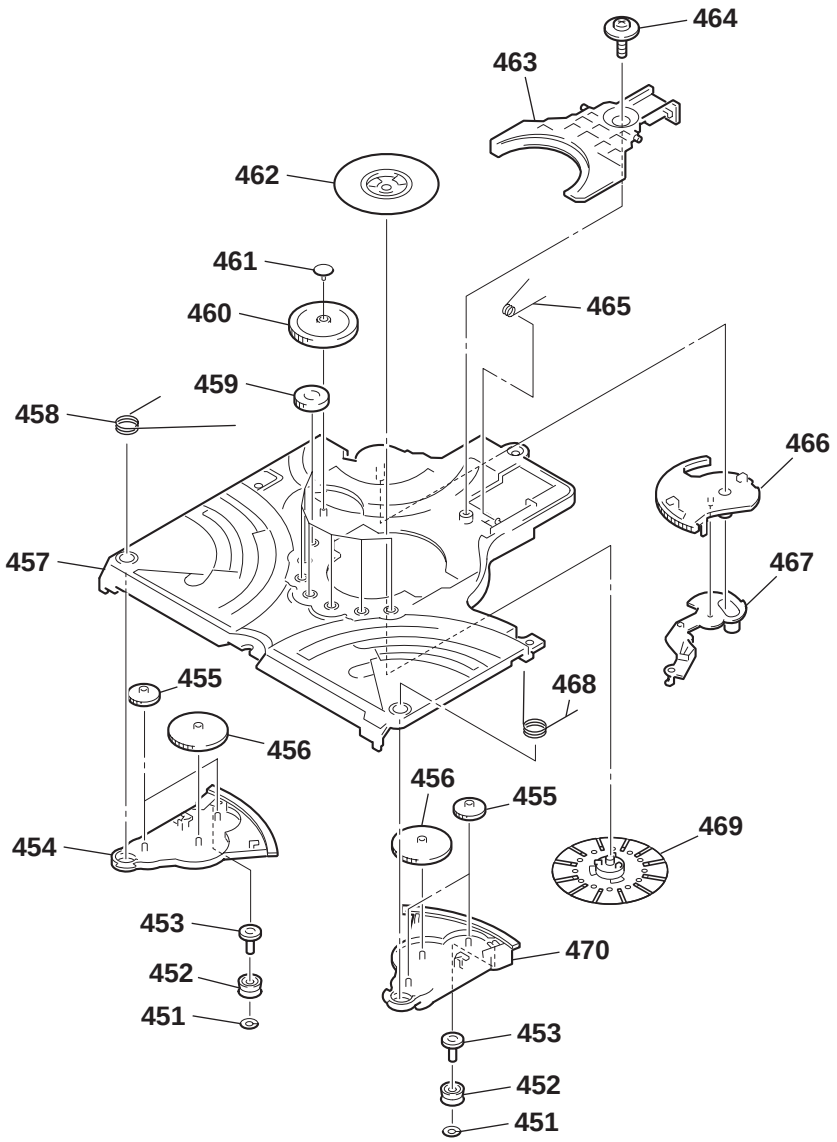
Ref. No.	Part No.	Description	Remark
351	4-249-825-01	SPR-E, HOLDER, DOWN, 213	
352	X-4956-146-1	HOLDER (BU215) ASSY	
353	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
354	4-227-549-11	INSULATOR	
355	4-227-045-31	SPRING (INSULATOR), COIL	
356	4-231-151-01	STOPPER (BU)	
357	4-218-253-31	+BTTP M2.6	
359	4-951-620-01	SCREW (2.6X8), +BVTP	
360	4-245-639-01	LEVER (CL UP2)	

7-7. CD MECHANISM DECK SECTION-2 (CDM80B-F1BD81)



Ref. No.	Part No.	Description	Remark
401	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
403	4-245-653-01	BELT (MOT)	
404	4-245-662-02	PULLEY (GEAR)	
405	4-245-646-01	GEAR (IDL-F)	
406	4-245-644-01	GEAR (IDL-D)	
407	4-245-645-01	GEAR (IDL-E)	
408	4-246-203-01	LEVER (RELEASE)	
409	4-245-630-01	LEVER (SW)	
410	4-951-620-01	SCREW (2.6X8), +BVTP	
412	1-688-337-11	DRIVER BOARD	
M701	X-2021-530-1	MOTOR (PULLEY) ASSY (LOADING)	
#8	7-623-921-01	WASHER 1.7, NYLON	
#9	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	

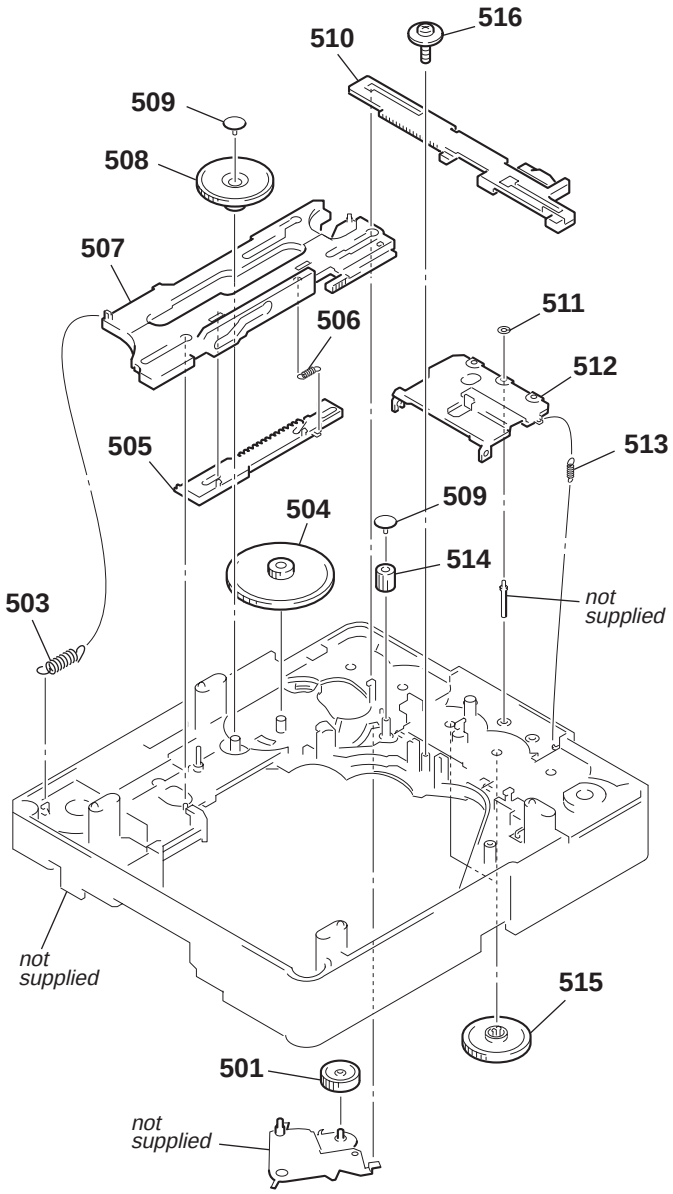
7-8. CD MECHANISM DECK SECTION-3 (CDM80B-F1BD81)



Ref. No.	Part No.	Description	Remark
451	4-245-627-01	WASHER (6-2.7-0.4)	
452	4-245-637-01	ROLLER, RUBBER	
453	4-245-649-01	GEAR (IDL-I)	
454	4-245-657-01	LEVER (LOADING-R)	
455	4-245-647-01	GEAR (IDL-G)	
456	4-245-648-01	GEAR (IDL-H)	
457	4-245-655-01	CHASSIS (TOP)	
458	4-245-631-01	SPT-T (LOADING-R)	
459	4-245-650-01	GEAR (IDL-J)	
460	4-245-651-01	GEAR (IDL-L)	

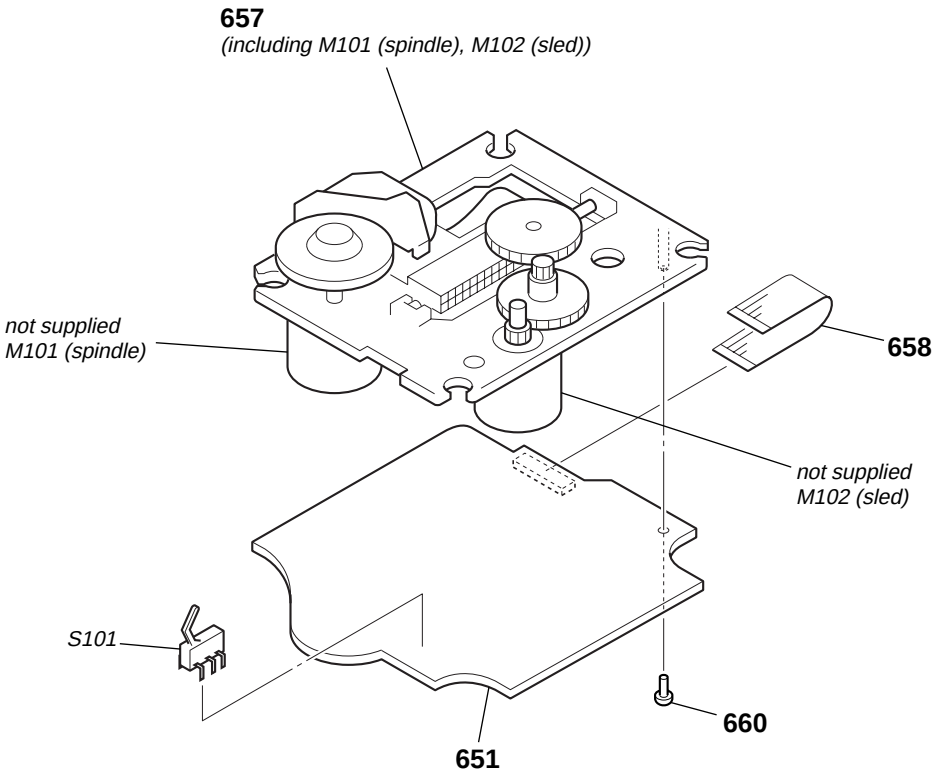
Ref. No.	Part No.	Description	Remark
461	4-245-640-01	GEAR (CAP)	
462	1-452-925-21	MAGNET ASSY	
463	4-245-638-01	LEVER (CL UP1)	
464	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
465	4-245-636-01	SPR-T CL DOWN	
466	4-245-658-01	LEVER (DISC STOP)	
467	4-245-659-01	LEVER (DISC SENSOR)	
468	4-245-632-01	SPR-T (LOADING-L)	
469	X-2021-532-1	CLAMPER 213 ASSY	
470	4-245-656-01	LEVER (LOADING-L)	

7-9. CD MECHANISM DECK SECTION-4 (CDM80B-F1BD81)



Ref. No.	Part No.	Description	Remark
501	4-245-643-01	GEAR (IDL-C)	
503	4-248-722-01	SPR-E, DIR	
504	4-245-642-01	GEAR (IDL-B)	
505	4-245-814-01	LEVER (DIR FIRST)	
506	4-245-633-01	SPR-E DIR BACK	
507	4-245-660-01	LEVER (DIR)	
508	4-245-641-01	GEAR (IDL-A)	
509	4-245-640-01	GEAR (CAP)	
510	4-245-628-01	LEVER (BU LOCK)	
511	4-248-206-01	WASHER (3-1-0.4)	
512	4-245-624-01	LEVER, CLOSE	
513	4-245-635-01	SPR-E LEVER CLOSE	
514	4-245-629-01	GEAR (BU LOCK)	
515	4-245-644-01	GEAR (IDL-D)	
516	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	

7-10. BASE UNIT SECTION (BU-F1BD81A)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
651	A-4751-431-A	CD BOARD, COMPLETE	
⚠657	8-820-244-11	OPTICAL PICK-UP KSM-215DCP/C2NP	
658	1-827-992-11	WIRE (FLAT TYPE) (16 CORE)	
660	4-951-620-01	SCREW (2.6X8), +BVTP	
S101	1-771-853-11	SWITCH, DETECTION (LIMIT)	

SECTION 8
ELECTRICAL PARTS LIST

AMP

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Abbreviation
  AR : Argentina model
  AUS : Australian model
  HK : Hong Kong model
  KR : Korean model
  SP : Singapore model
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-1052-493-A	AMP BOARD, COMPLETE (US)			
	A-1061-981-A	AMP BOARD, COMPLETE (AR)			
	A-1059-502-A	AMP BOARD, COMPLETE (HK, SP, KR, AUS)			
	A-4751-271-A	AMP BOARD, COMPLETE (AEP)			
		**********			
		< CAPACITOR >			
C501	1-126-964-11	ELECT	10uF	20%	50V
C502	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C503	1-126-967-11	ELECT	47uF	20%	50V
C504	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C505	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C506	1-126-957-11	ELECT	0.22uF	20%	50V
C507	1-130-495-00	MYLAR	0.1uF	5%	50V
C551	1-126-964-11	ELECT	10uF	20%	50V
C552	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C553	1-126-967-11	ELECT	47uF	20%	50V
C554	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C555	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C556	1-126-957-11	ELECT	0.22uF	20%	50V
C557	1-130-495-00	MYLAR	0.1uF	5%	50V
C603	1-162-294-31	CERAMIC	0.001uF	10%	50V
C604	1-126-964-11	ELECT	10uF	20%	50V
C605	1-104-665-11	ELECT	100uF	20%	25V
C606	1-162-294-31	CERAMIC	0.001uF	10%	50V
C607	1-126-964-11	ELECT	10uF	20%	50V
C608	1-104-665-11	ELECT	100uF	20%	25V
C609	1-126-961-11	ELECT	2.2uF	20%	50V
C610	1-126-965-11	ELECT	22uF	20%	50V
C611	1-126-965-11	ELECT	22uF	20%	50V
C612	1-126-969-11	ELECT	220uF	20%	50V
C613	1-126-964-11	ELECT	10uF	20%	50V
C614	1-126-974-11	ELECT	3300uF	20%	50V (GPX7)
C614	1-128-550-11	ELECT	2200uF	20%	50V (GPX6)
C615	1-126-974-11	ELECT	3300uF	20%	50V (GPX7)
C615	1-128-550-11	ELECT	2200uF	20%	50V (GPX6)
C616	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C617	1-130-471-00	MYLAR	0.001uF	5%	50V

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN601	1-568-828-11	CONNECTOR, FFC 9P			
* CN602	1-564-510-11	PLUG, CONNECTOR 7P			
CN603	1-564-509-11	PLUG, CONNECTOR 6P			
CN604	1-564-506-11	PLUG, CONNECTOR 3P			
* CN605	1-815-444-11	PIN, CONNECTOR (PWB) 3P			
		< DIODE >			
D501	8-719-991-33	DIODE	1SS133T-77		
D551	8-719-991-33	DIODE	1SS133T-77		
D603	8-719-991-33	DIODE	1SS133T-77		
D607	8-719-109-85	DIODE	RD5.1ESB2 (US, AEP, AR)		
D608	8-719-991-33	DIODE	1SS133T-77 (US, AEP, AR)		
D609	8-719-991-33	DIODE	1SS133T-77		
D610	8-719-991-33	DIODE	1SS133T-77		
D611	8-719-991-33	DIODE	1SS133T-77		
D612	8-719-991-33	DIODE	1SS133T-77		
		< IC >			
IC601	6-705-621-01	IC	STK433-070 (GPX7)		
IC601	6-705-625-01	IC	STK433-040 (GPX6)		
IC602	6-703-610-01	IC	RT8H015C-T112-1		
		< TRANSISTOR >			
Q501	8-729-141-30	TRANSISTOR	2SC3623A-LK		
Q502	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q551	8-729-141-30	TRANSISTOR	2SC3623A-LK		
Q552	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q601	8-729-038-54	TRANSISTOR	KRA102S		
Q602	8-729-038-54	TRANSISTOR	KRA102S		
Q603	8-729-038-67	TRANSISTOR	KRC102S		
Q604	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q605	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q606	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q607	8-729-016-42	TRANSISTOR	KTC3199GR-TP		(US, AEP, AR)
Q608	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q609	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q610	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q611	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
		< RESISTOR >			
R501	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R502	1-216-842-11	METAL CHIP	56K	5%	1/10W

AMP **CD**

Ref. No.	Part No.	Description			Remark
R503	1-216-821-11	METAL CHIP	1K	5%	1/10W
R505	1-216-864-11	SHORT CHIP	0		
R506	1-216-822-11	METAL CHIP	1.2K	5%	1/10W (GPX7)
R506	1-216-824-11	METAL CHIP	1.8K	5%	1/10W (GPX6)
R507	1-216-842-11	METAL CHIP	56K	5%	1/10W
R508	1-216-821-11	METAL CHIP	1K	5%	1/10W
R509	1-216-835-11	METAL CHIP	15K	5%	1/10W
⚠R510	1-220-755-11	METAL	0.22	10%	2W F
R511	1-216-845-11	METAL CHIP	100K	5%	1/10W
R512	1-260-076-11	CARBON	10	5%	1/2W
R513	1-216-841-11	METAL CHIP	47K	5%	1/10W
⚠R514	1-215-890-11	METAL OXIDE	470	5%	2W F
R515	1-216-845-11	METAL CHIP	100K	5%	1/10W
R551	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R552	1-216-842-11	METAL CHIP	56K	5%	1/10W
R553	1-216-821-11	METAL CHIP	1K	5%	1/10W
R555	1-216-864-11	SHORT CHIP	0		
R556	1-216-822-11	METAL CHIP	1.2K	5%	1/10W (GPX7)
R556	1-216-824-11	METAL CHIP	1.8K	5%	1/10W (GPX6)
R557	1-216-842-11	METAL CHIP	56K	5%	1/10W
R558	1-216-821-11	METAL CHIP	1K	5%	1/10W
R559	1-216-835-11	METAL CHIP	15K	5%	1/10W
⚠R560	1-220-755-11	METAL	0.22	10%	2W F
R561	1-216-845-11	METAL CHIP	100K	5%	1/10W
R562	1-260-076-11	CARBON	10	5%	1/2W
R563	1-216-842-11	METAL CHIP	56K	5%	1/10W
⚠R564	1-215-890-11	METAL OXIDE	470	5%	2W F
R565	1-216-845-11	METAL CHIP	100K	5%	1/10W
R601	1-216-833-11	METAL CHIP	10K	5%	1/10W
R602	1-216-849-11	METAL CHIP	220K	5%	1/10W
R603	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R604	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R605	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
⚠R606	1-202-972-61	FUSIBLE	1	5%	1/4W F
⚠R607	1-202-972-61	FUSIBLE	1	5%	1/4W F
⚠R608	1-212-881-11	FUSIBLE	100	5%	1/4W F
R609	1-216-833-11	METAL CHIP	10K	5%	1/10W
R610	1-216-839-11	METAL CHIP	33K	5%	1/10W
R611	1-216-833-11	METAL CHIP	10K	5%	1/10W
R612	1-216-845-11	METAL CHIP	100K	5%	1/10W
R613	1-216-833-11	METAL CHIP	10K	5%	1/10W
R614	1-216-833-11	METAL CHIP	10K	5%	1/10W
⚠R615	1-215-890-11	METAL OXIDE	470	5%	2W F (HK, SP, KR, AUS)
⚠R615	1-216-455-11	METAL OXIDE	560	5%	2W F (US, AEP, AR)
R616	1-216-833-11	METAL CHIP	10K	5%	1/10W (US, AEP, AR)
R617	1-216-833-11	METAL CHIP	10K	5%	1/10W (US, AEP, AR)
R618	1-216-833-11	METAL CHIP	10K	5%	1/10W (US, AEP, AR)
R619	1-216-821-11	METAL CHIP	1K	5%	1/10W
R620	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R621	1-216-845-11	METAL CHIP	100K	5%	1/10W
R622	1-216-837-11	METAL CHIP	22K	5%	1/10W
R624	1-216-821-11	METAL CHIP	1K	5%	1/10W
R625	1-216-809-11	METAL CHIP	100	5%	1/10W
R626	1-216-809-11	METAL CHIP	100	5%	1/10W
R628	1-216-853-11	METAL CHIP	470K	5%	1/10W
		< THERMISTOR (POSITIVE) >			
THP821	1-807-796-11	THERMISTOR (US, AEP, AR)			
**********					
	A-4751-431-A	CD BOARD, COMPLETE			
		**********			
		< CAPACITOR/SHORT >			
C10	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C11	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C14	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C15	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C16	1-115-156-11	CERAMIC CHIP	1uF		10V
C17	1-126-246-11	ELECT CHIP	220uF	20%	4V
C18	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C111	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C112	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C113	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C114	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C115	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C116	1-128-995-21	ELECT CHIP	100uF	20%	10V
C122	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C123	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C124	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C125	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C131	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C132	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V
C133	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C134	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C141	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C142	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C143	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C151	1-128-995-21	ELECT CHIP	100uF	20%	10V
C161	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C162	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C163	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C171	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C172	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C174	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C181	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C182	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C183	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C184	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C185	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C186	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C194	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C195	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C196	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C201	1-128-995-21	ELECT CHIP	100uF	20%	10V
C203	1-128-995-21	ELECT CHIP	100uF	20%	10V
C209	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C210	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

CD DRIVER

Ref. No.	Part No.	Description			Remark
C211	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C212	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C213	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C251	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C252	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C255	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C257	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C258	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C259	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C260	1-128-394-11	ELECT CHIP	220uF	20%	10V
C302	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C303	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C305	1-126-246-11	ELECT CHIP	220uF	20%	4V
C306	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C307	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C308	1-126-208-21	ELECT CHIP	47uF	20%	4V
C309	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C310	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C311	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C312	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C313	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C314	1-126-208-21	ELECT CHIP	47uF	20%	4V
C315	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C316	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C317	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C318	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C320	1-216-864-11	SHORT CHIP	0		
		< CONNECTOR >			
CN101	1-770-425-11	CONNECTOR, FFC/FPC 16P			
CN201	1-818-350-11	CONNECTOR (FFC) 27P			
		< FERRITE BEAD >			
FB301	1-500-445-21	FERRITE, EMI (SMD) (2012)			
		< IC >			
IC101	8-752-425-12	IC CXD3059AR			
IC251	6-705-808-01	IC BA5947FM			
IC301	6-705-365-01	IC TC94A34FG-002			
IC303	6-705-807-01	IC BH15FB1WG			
		< TRANSISTOR >			
Q10	6-550-363-01	TRANSISTOR	2SB1690KT146		
		< RESISTOR/FERRITE BEAD >			
R10	1-216-791-11	METAL CHIP	3.3	5%	1/10W
R11	1-216-864-11	SHORT CHIP	0		
R12	1-216-845-11	METAL CHIP	100K	5%	1/10W
R13	1-218-446-11	METAL CHIP	1	5%	1/10W
R111	1-216-821-11	METAL CHIP	1K	5%	1/10W
R112	1-216-835-11	METAL CHIP	15K	5%	1/10W
R113	1-216-821-11	METAL CHIP	1K	5%	1/10W
R114	1-216-835-11	METAL CHIP	15K	5%	1/10W
R121	1-216-835-11	METAL CHIP	15K	5%	1/10W
R131	1-216-857-11	METAL CHIP	1M	5%	1/10W
R132	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R133	1-216-848-11	METAL CHIP	180K	5%	1/10W
R141	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R142	1-216-821-11	METAL CHIP	1K	5%	1/10W
R143	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R151	1-216-864-11	SHORT CHIP	0		
R161	1-216-809-11	METAL CHIP	100	5%	1/10W
R162	1-216-841-11	METAL CHIP	47K	5%	1/10W
R163	1-216-809-11	METAL CHIP	100	5%	1/10W
R165	1-216-864-11	SHORT CHIP	0		
R171	1-216-817-11	METAL CHIP	470	5%	1/10W
R172	1-216-857-11	METAL CHIP	1M	5%	1/10W
R173	1-216-295-00	SHORT CHIP	0		
R181	1-216-809-11	METAL CHIP	100	5%	1/10W
R182	1-216-809-11	METAL CHIP	100	5%	1/10W
R191	1-216-864-11	SHORT CHIP	0		
R201	1-500-445-21	FERRITE, EMI (SMD) (2012)			
R203	1-216-864-11	SHORT CHIP	0		
R204	1-500-445-21	FERRITE, EMI (SMD) (2012)			
R205	1-216-864-11	SHORT CHIP	0		
R251	1-216-833-11	METAL CHIP	10K	5%	1/10W
R252	1-216-837-11	METAL CHIP	22K	5%	1/10W
R253	1-216-833-11	METAL CHIP	10K	5%	1/10W
R301	1-216-845-11	METAL CHIP	100K	5%	1/10W
R302	1-216-833-11	METAL CHIP	10K	5%	1/10W
R303	1-216-845-11	METAL CHIP	100K	5%	1/10W
R305	1-216-845-11	METAL CHIP	100K	5%	1/10W
R306	1-216-864-11	SHORT CHIP	0		
R307	1-216-833-11	METAL CHIP	10K	5%	1/10W
R313	1-216-813-11	METAL CHIP	220	5%	1/10W
R351	1-216-809-11	METAL CHIP	100	5%	1/10W
R352	1-216-809-11	METAL CHIP	100	5%	1/10W
R353	1-216-809-11	METAL CHIP	100	5%	1/10W
R354	1-216-809-11	METAL CHIP	100	5%	1/10W
R401	1-216-809-11	METAL CHIP	100	5%	1/10W
R402	1-216-809-11	METAL CHIP	100	5%	1/10W
R403	1-216-809-11	METAL CHIP	100	5%	1/10W
R404	1-216-809-11	METAL CHIP	100	5%	1/10W
R405	1-216-809-11	METAL CHIP	100	5%	1/10W
R406	1-216-809-11	METAL CHIP	100	5%	1/10W
R407	1-216-809-11	METAL CHIP	100	5%	1/10W
R408	1-216-809-11	METAL CHIP	100	5%	1/10W
R409	1-216-809-11	METAL CHIP	100	5%	1/10W
R410	1-216-809-11	METAL CHIP	100	5%	1/10W
R411	1-216-809-11	METAL CHIP	100	5%	1/10W
R412	1-216-809-11	METAL CHIP	100	5%	1/10W
R419	1-216-809-11	METAL CHIP	100	5%	1/10W
		< VIBRATOR >			
X171	1-767-408-21	VIBRATOR, CRYSTAL (16.9344MHz)			

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	1-688-337-11	DRIVER BOARD			
		**********			
		< CAPACITOR >			
C705	1-162-306-11	CERAMIC	0.01uF	20%	16V
C711	1-126-964-11	ELECT	10uF	20%	50V

DRIVER **MAIN**

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN701	1-785-333-11	PIN, CONNECTOR (LIGHT ANGLE) 7P			
		< DIODE >			
D701	8-719-921-40	DIODE MTZJ-4.7C			
		< IC >			
IC701	8-759-598-69	IC BA6956AN			
		< RESISTOR >			
R701	1-249-415-11	CARBON	680	5%	1/4W
R702	1-247-807-31	CARBON	100	5%	1/4W
		< SWITCH >			
S701	1-762-951-13	SWITCH, PUSH (OUT)			
S702	1-762-951-13	SWITCH, PUSH (CHUCK)			
S703	1-762-951-13	SWITCH, PUSH (TRIGGER)			
**********					
	A-1052-489-A	MAIN BOARD, COMPLETE (US)			
	A-1059-491-A	MAIN BOARD, COMPLETE (HK, SP)			
	A-1059-528-A	MAIN BOARD, COMPLETE (KR)			
	A-1059-562-A	MAIN BOARD, COMPLETE (AUS)			
	A-1061-983-A	MAIN BOARD, COMPLETE (AR)			
	A-4751-274-A	MAIN BOARD, COMPLETE (AEP)			
		**********			
		< CAPACITOR >			
C101	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C102	1-126-964-11	ELECT	10uF	20%	50V
C103	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C105	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C106	1-162-946-11	CERAMIC CHIP	27PF	5%	50V
C107	1-130-479-00	MYLAR	0.0047uF	5%	50V
C109	1-126-964-11	ELECT	10uF	20%	50V
C110	1-126-964-11	ELECT	10uF	20%	50V
C111	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C112	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C113	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C114	1-126-960-11	ELECT	1uF	20%	50V
C115	1-126-964-11	ELECT	10uF	20%	50V
C116	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C117	1-126-964-11	ELECT	10uF	20%	50V
C118	1-126-964-11	ELECT	10uF	20%	50V
C119	1-126-964-11	ELECT	10uF	20%	50V
C122	1-130-475-00	MYLAR	0.0022uF	5%	50V (GPX6)
C122	1-130-476-00	MYLAR	0.0027uF	5%	50V (GPX7)
C123	1-130-495-00	MYLAR	0.1uF	5%	50V (GPX6)
C123	1-130-499-00	MYLAR	0.22uF	5%	50V (GPX7)
C124	1-126-967-11	ELECT	47uF	20%	50V
C125	1-126-965-11	ELECT	22uF	20%	50V
C128	1-126-964-11	ELECT	10uF	20%	50V
C131	1-162-962-11	CERAMIC CHIP	470PF	10%	50V

Ref. No.	Part No.	Description			Remark
C133	1-130-495-00	MYLAR	0.1uF	5%	50V (AEP, KR)
C134	1-130-495-00	MYLAR	0.1uF	5%	50V (AEP, KR)
C135	1-162-306-11	CERAMIC	0.01uF	20%	16V
C137	1-126-965-11	ELECT	22uF	20%	50V
C138	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C141	1-126-964-11	ELECT	10uF	20%	50V
C201	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C202	1-126-964-11	ELECT	10uF	20%	50V
C203	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C205	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C206	1-162-946-11	CERAMIC CHIP	27PF	5%	50V
C207	1-130-479-00	MYLAR	0.0047uF	5%	50V
C209	1-126-964-11	ELECT	10uF	20%	50V
C210	1-126-964-11	ELECT	10uF	20%	50V
C211	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C212	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C213	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C214	1-126-960-11	ELECT	1uF	20%	50V
C215	1-126-964-11	ELECT	10uF	20%	50V
C216	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C217	1-126-964-11	ELECT	10uF	20%	50V
C218	1-126-964-11	ELECT	10uF	20%	50V
C219	1-126-964-11	ELECT	10uF	20%	50V
C222	1-130-475-00	MYLAR	0.0022uF	5%	50V (GPX6)
C222	1-130-476-00	MYLAR	0.0027uF	5%	50V (GPX7)
C223	1-130-495-00	MYLAR	0.1uF	5%	50V (GPX6)
C223	1-130-499-00	MYLAR	0.22uF	5%	50V (GPX7)
C224	1-126-967-11	ELECT	47uF	20%	50V
C225	1-126-965-11	ELECT	22uF	20%	50V
C228	1-126-964-11	ELECT	10uF	20%	50V
C231	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C233	1-130-495-00	MYLAR	0.1uF	5%	50V (AEP, KR)
C234	1-130-495-00	MYLAR	0.1uF	5%	50V (AEP, KR)
C235	1-162-306-11	CERAMIC	0.01uF	20%	16V
C237	1-126-965-11	ELECT	22uF	20%	50V
C238	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C241	1-126-964-11	ELECT	10uF	20%	50V
C302	1-137-150-11	FILM	0.01uF	5%	100V
C303	1-124-257-00	ELECT	2.2uF	20%	50V
C304	1-126-964-11	ELECT	10uF	20%	50V
C305	1-126-947-11	ELECT	47uF	20%	35V
C306	1-126-964-11	ELECT	10uF	20%	50V
C307	1-130-485-00	MYLAR	0.015uF	5%	50V
C308	1-130-481-00	MYLAR	0.0068uF	5%	50V
C309	1-130-481-00	MYLAR	0.0068uF	5%	50V
C310	1-130-486-00	MYLAR	0.018uF	5%	50V
C314	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C317	1-126-965-11	ELECT	22uF	20%	50V
C318	1-126-935-11	ELECT	470uF	20%	16V
C319	1-126-935-11	ELECT	470uF	20%	16V
C320	1-126-934-11	ELECT	220uF	20%	16V

MAIN

Ref. No.	Part No.	Description			Remark
C321	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C322	1-126-934-11	ELECT	220uF	20%	16V
C324	1-126-963-11	ELECT	4.7uF	20%	50V (US, AEP, AR)
C325	1-126-935-11	ELECT	470uF	20%	16V
C326	1-130-483-00	MYLAR	0.01uF	5%	50V
C327	1-130-483-00	MYLAR	0.01uF	5%	50V
C328	1-126-927-11	ELECT	2200uF	20%	10V
C329	1-126-964-11	ELECT	10uF	20%	50V
C330	1-126-935-11	ELECT	470uF	20%	16V
C331	1-126-935-11	ELECT	470uF	20%	16V
C333	1-126-964-11	ELECT	10uF	20%	50V
C334	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C335	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C336	1-126-916-11	ELECT	1000uF	20%	6.3V
C337	1-127-888-21	CERAMIC	0.1uF	10%	50V
C338	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C339	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C340	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C342	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C343	1-126-927-11	ELECT	2200uF	20%	10V
C344	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C345	1-128-809-11	CERAMIC	100PF	5%	50V
C346	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C347	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C348	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C349	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C350	1-128-809-11	CERAMIC	100PF	5%	50V
C351	1-128-809-11	CERAMIC	100PF	5%	50V
C352	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C353	1-126-926-11	ELECT	1000uF	20%	10V
C354	1-128-809-11	CERAMIC	100PF	5%	50V
C355	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C356	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C357	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C358	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C359	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C362	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C367	1-126-926-11	ELECT	1000uF	20%	10V
C368	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C371	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C372	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C373	1-126-947-11	ELECT	47uF	20%	35V
C374	1-126-964-11	ELECT	10uF	20%	50V (US, AEP, AR)
C391	1-127-888-21	CERAMIC	0.1uF	10%	50V
C393	1-127-888-21	CERAMIC	0.1uF	10%	50V
C394	1-127-888-21	CERAMIC	0.1uF	10%	50V
C395	1-104-656-11	ELECT	2200uF	20%	6.3V
C396	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C397	1-164-156-11	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
* CN301	1-564-511-11	PLUG, CONNECTOR 8P			
CN302	1-770-516-31	FFC/CONNECTOR, FPC (LIF (NON-ZIF)) 8P			
CN304	1-779-295-11	CONNECTOR, FFC (LIF (NON-ZIF)) 27P			
CN305	1-568-830-11	CONNECTOR, FFC 11P (EXCEPT AEP)			
CN305	1-784-776-11	CONNECTOR, FFC 15P (AEP)			
CN306	1-568-828-11	CONNECTOR, FFC 9P			
CN310	1-568-838-11	CONNECTOR, FFC 21P			
CN313	1-564-506-11	PLUG, CONNECTOR 3P (US, AEP, AR)			
		< DIODE >			
D301	8-719-991-33	DIODE 1SS133T-77			
D302	8-719-991-33	DIODE 1SS133T-77			
D303	8-719-991-33	DIODE 1SS133T-77			
D304	8-719-991-33	DIODE 1SS133T-77			
D305	8-719-991-33	DIODE 1SS133T-77			
D306	8-719-991-33	DIODE 1SS133T-77			
D307	8-719-991-33	DIODE 1SS133T-77			
D308	8-719-991-33	DIODE 1SS133T-77			
D309	8-719-991-33	DIODE 1SS133T-77			
D310	6-500-522-01	DIODE 10EDB40-TA1B2			
D311	6-500-522-01	DIODE 10EDB40-TA1B2			
D312	6-500-522-01	DIODE 10EDB40-TA1B2			
D313	8-719-991-33	DIODE 1SS133T-77 (US, AEP, AR)			
D314	8-719-991-33	DIODE 1SS133T-77			
D316	8-719-991-33	DIODE 1SS133T-77 (AEP)			
D317	8-719-991-33	DIODE 1SS133T-77			
D318	8-719-991-33	DIODE 1SS133T-77			
D319	8-719-991-33	DIODE 1SS133T-77			
D325	8-719-991-33	DIODE 1SS133T-77			
D326	8-719-991-33	DIODE 1SS133T-77			
D327	8-719-991-33	DIODE 1SS133T-77			
D328	8-719-921-88	DIODE MTZJ-13B (US, AEP, AR)			
D329	8-719-988-61	DIODE 1SS355TE-17			
D330	8-719-988-61	DIODE 1SS355TE-17			
D331	6-500-522-01	DIODE 10EDB40-TA1B2			
		< FERRITE BEAD/SHORT >			
FB301	1-412-473-21	INDUCTOR (SMALL TYPE)			
FB302	1-216-864-11	SHORT CHIP 0			
FB303	1-216-864-11	SHORT CHIP 0			
FB304	1-216-864-11	SHORT CHIP 0			
FB305	1-216-864-11	SHORT CHIP 0			
FB306	1-216-864-11	SHORT CHIP 0			
FB307	1-500-445-21	FERRITE, EMI (SMD) (2012)			
FB308	1-216-295-00	SHORT CHIP 0			
FB309	1-500-445-21	FERRITE, EMI (SMD) (2012)			
		< IC >			
IC301	8-759-508-69	IC BA3126N			
IC302	6-705-622-01	IC BD3402KS2			
IC304	8-759-701-59	IC NJM78M09FA			
IC305	6-801-402-01	IC BD4729GTR			
IC306	6-803-818-01	IC M3062CMEN-A00FPU0			
		< JACK >			
J301	1-764-593-21	JACK 2P (MD/VIDEO)			
		< SHORT >			
JW200	1-216-295-00	SHORT CHIP 0			
JW241	1-216-864-11	SHORT CHIP 0			
JW302	1-216-864-11	SHORT CHIP 0			

MAIN

Ref. No.	Part No.	Description			Remark
		< COIL >			
L102	1-422-009-13	COIL, AIR-CORE			
L202	1-422-009-13	COIL, AIR-CORE			
L302	1-414-857-11	INDUCTOR	100uH		
		< TRANSISTOR >			
Q102	8-729-107-43	TRANSISTOR	2SC3624-L18		
Q202	8-729-107-43	TRANSISTOR	2SC3624-L18		
Q301	8-729-037-16	TRANSISTOR	KRA103M-AT		
Q302	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q303	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q304	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q305	8-729-801-93	TRANSISTOR	2SD1387-3		
Q306	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q307	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q308	8-729-037-13	TRANSISTOR	KTA1271Y		
Q309	8-729-054-16	TRANSISTOR	KRC402-RTK		
Q310	8-729-037-13	TRANSISTOR	KTA1271Y		
Q311	8-729-054-16	TRANSISTOR	KRC402-RTK		
Q312	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q313	8-729-038-67	TRANSISTOR	KRC102S		
Q314	8-729-016-42	TRANSISTOR	KTC3199GR-TP		
Q315	8-729-040-76	TRANSISTOR	KTA1273-Y-AT (US, AEP, AR)		
Q316	8-729-016-42	TRANSISTOR	KTC3199GR-TP		(US, AEP, AR)
Q317	8-729-038-54	TRANSISTOR	KRA102S		
Q318	8-729-038-67	TRANSISTOR	KRC102S		
Q319	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q320	8-729-038-67	TRANSISTOR	KRC102S		
Q321	8-729-036-58	TRANSISTOR	KRC102M-AT		
Q322	8-729-037-13	TRANSISTOR	KTA1271Y		
Q323	8-729-038-67	TRANSISTOR	KRC102S		
Q324	8-729-028-54	TRANSISTOR	KTC3205 (US, AEP, AR)		
		< RESISTOR >			
R101	1-216-821-11	METAL CHIP	1K	5%	1/10W
R102	1-216-841-11	METAL CHIP	47K	5%	1/10W
R103	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R104	1-216-833-11	METAL CHIP	10K	5%	1/10W
R105	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R106	1-216-841-11	METAL CHIP	47K	5%	1/10W
R107	1-216-845-11	METAL CHIP	100K	5%	1/10W
R108	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R109	1-216-851-11	METAL CHIP	330K	5%	1/10W
R110	1-216-853-11	METAL CHIP	470K	5%	1/10W
R111	1-216-812-11	METAL CHIP	180	5%	1/10W
R112	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R113	1-216-847-11	METAL CHIP	150K	5%	1/10W
R114	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R118	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R120	1-216-841-11	METAL CHIP	47K	5%	1/10W (US, AEP, AR)
R122	1-260-076-11	CARBON	10	5%	1/2W (AEP, KR)
R123	1-216-821-11	METAL CHIP	1K	5%	1/10W
R124	1-216-845-11	METAL CHIP	100K	5%	1/10W
R126	1-249-429-11	CARBON	10K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R127	1-216-821-11	METAL CHIP	1K	5%	1/10W
R128	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R201	1-216-821-11	METAL CHIP	1K	5%	1/10W
R202	1-216-841-11	METAL CHIP	47K	5%	1/10W
R203	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R204	1-216-833-11	METAL CHIP	10K	5%	1/10W
R205	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R206	1-216-841-11	METAL CHIP	47K	5%	1/10W
R207	1-216-845-11	METAL CHIP	100K	5%	1/10W
R208	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R209	1-216-851-11	METAL CHIP	330K	5%	1/10W
R210	1-216-853-11	METAL CHIP	470K	5%	1/10W
R211	1-216-812-11	METAL CHIP	180	5%	1/10W
R212	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R213	1-216-847-11	METAL CHIP	150K	5%	1/10W
R214	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R218	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R220	1-216-841-11	METAL CHIP	47K	5%	1/10W (US, AEP, AR)
R222	1-260-076-11	CARBON	10	5%	1/2W (AEP, KR)
R223	1-216-821-11	METAL CHIP	1K	5%	1/10W
R224	1-216-845-11	METAL CHIP	100K	5%	1/10W
R226	1-249-429-11	CARBON	10K	5%	1/4W
R227	1-216-821-11	METAL CHIP	1K	5%	1/10W
R228	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R301	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
⚠R302	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
⚠R303	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
R304	1-216-836-11	METAL CHIP	18K	5%	1/10W
R305	1-216-836-11	METAL CHIP	18K	5%	1/10W
R306	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R307	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R308	1-216-837-11	METAL CHIP	22K	5%	1/10W
R309	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R310	1-216-833-11	METAL CHIP	10K	5%	1/10W
R311	1-216-841-11	METAL CHIP	47K	5%	1/10W
R312	1-216-821-11	METAL CHIP	1K	5%	1/10W
R314	1-216-841-11	METAL CHIP	47K	5%	1/10W
R315	1-216-821-11	METAL CHIP	1K	5%	1/10W
R318	1-249-429-11	CARBON	10K	5%	1/4W
R319	1-216-837-11	METAL CHIP	22K	5%	1/10W
R320	1-216-841-11	METAL CHIP	47K	5%	1/10W
R321	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R322	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R323	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R324	1-216-833-11	METAL CHIP	10K	5%	1/10W
R325	1-249-429-11	CARBON	10K	5%	1/4W
R326	1-216-845-11	METAL CHIP	100K	5%	1/10W
R327	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (US, AEP, AR)
R328	1-216-833-11	METAL CHIP	10K	5%	1/10W (US, AEP, AR)
R329	1-216-845-11	METAL CHIP	100K	5%	1/10W (US, AEP, AR)
R330	1-216-813-11	METAL CHIP	220	5%	1/10W
R331	1-216-833-11	METAL CHIP	10K	5%	1/10W
R332	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R333	1-216-837-11	METAL CHIP	22K	5%	1/10W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

MAIN

Ref. No.	Part No.	Description			Remark
R334	1-216-841-11	METAL CHIP	47K	5%	1/10W
R335	1-249-429-11	CARBON	10K	5%	1/4W
R339	1-216-841-11	METAL CHIP	47K	5%	1/10W
R340	1-216-841-11	METAL CHIP	47K	5%	1/10W
R341	1-216-841-11	METAL CHIP	47K	5%	1/10W
R342	1-216-841-11	METAL CHIP	47K	5%	1/10W
R350	1-249-425-11	CARBON	4.7K	5%	1/4W
R358	1-216-841-11	METAL CHIP	47K	5%	1/10W
R359	1-216-841-11	METAL CHIP	47K	5%	1/10W
R360	1-216-841-11	METAL CHIP	47K	5%	1/10W
R361	1-249-429-11	CARBON	10K	5%	1/4W
R362	1-249-429-11	CARBON	10K	5%	1/4W
R363	1-216-833-11	METAL CHIP	10K	5%	1/10W
R366	1-216-864-11	SHORT CHIP	0 (HK, SP, KR)		
R366	1-249-419-11	CARBON	1.5K	5%	1/4W (AUS)
R366	1-249-425-11	CARBON	4.7K	5%	1/4W (US, AR)
R367	1-216-821-11	METAL CHIP	1K	5%	1/10W (AR)
R367	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (US)
R367	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (AUS)
R367	1-216-864-11	SHORT CHIP	0 (AEP)		
R368	1-247-843-11	CARBON	3.3K	5%	1/4W
R369	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R370	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R372	1-249-437-11	CARBON	47K	5%	1/4W
R373	1-249-437-11	CARBON	47K	5%	1/4W
R374	1-216-841-11	METAL CHIP	47K	5%	1/10W
R375	1-216-821-11	METAL CHIP	1K	5%	1/10W
R377	1-216-833-11	METAL CHIP	10K	5%	1/10W (EXCEPT AEP)
R378	1-216-833-11	METAL CHIP	10K	5%	1/10W (EXCEPT AEP)
R379	1-216-833-11	METAL CHIP	10K	5%	1/10W
R381	1-216-841-11	METAL CHIP	47K	5%	1/10W
R382	1-216-821-11	METAL CHIP	1K	5%	1/10W
R390	1-216-841-11	METAL CHIP	47K	5%	1/10W
R391	1-216-841-11	METAL CHIP	47K	5%	1/10W
R393	1-216-841-11	METAL CHIP	47K	5%	1/10W
R394	1-216-821-11	METAL CHIP	1K	5%	1/10W
R395	1-216-821-11	METAL CHIP	1K	5%	1/10W
R396	1-216-839-11	METAL CHIP	33K	5%	1/10W
R397	1-216-817-11	METAL CHIP	470	5%	1/10W (US, AEP, AR)
R404	1-216-833-11	METAL CHIP	10K	5%	1/10W
R405	1-216-809-11	METAL CHIP	100	5%	1/10W
R406	1-216-809-11	METAL CHIP	100	5%	1/10W
R409	1-216-833-11	METAL CHIP	10K	5%	1/10W
R411	1-216-821-11	METAL CHIP	1K	5%	1/10W
R412	1-216-821-11	METAL CHIP	1K	5%	1/10W
R413	1-216-864-11	SHORT CHIP	0		
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-247-807-31	CARBON	100	5%	1/4W
R419	1-247-807-31	CARBON	100	5%	1/4W
R420	1-216-841-11	METAL CHIP	47K	5%	1/10W
R422	1-216-809-11	METAL CHIP	100	5%	1/10W
R423	1-216-809-11	METAL CHIP	100	5%	1/10W
R424	1-216-809-11	METAL CHIP	100	5%	1/10W
R425	1-216-809-11	METAL CHIP	100	5%	1/10W
R426	1-216-809-11	METAL CHIP	100	5%	1/10W
R427	1-216-809-11	METAL CHIP	100	5%	1/10W
R428	1-216-809-11	METAL CHIP	100	5%	1/10W
R432	1-216-809-11	METAL CHIP	100	5%	1/10W
R433	1-216-809-11	METAL CHIP	100	5%	1/10W
R434	1-216-809-11	METAL CHIP	100	5%	1/10W
R435	1-216-809-11	METAL CHIP	100	5%	1/10W
R436	1-216-809-11	METAL CHIP	100	5%	1/10W
R437	1-216-809-11	METAL CHIP	100	5%	1/10W
R438	1-216-809-11	METAL CHIP	100	5%	1/10W
R439	1-216-809-11	METAL CHIP	100	5%	1/10W
R440	1-216-809-11	METAL CHIP	100	5%	1/10W
R441	1-216-809-11	METAL CHIP	100	5%	1/10W
R442	1-216-809-11	METAL CHIP	100	5%	1/10W
R443	1-216-809-11	METAL CHIP	100	5%	1/10W
R453	1-216-809-11	METAL CHIP	100	5%	1/10W
R455	1-216-809-11	METAL CHIP	100	5%	1/10W
R457	1-216-809-11	METAL CHIP	100	5%	1/10W
R458	1-216-809-11	METAL CHIP	100	5%	1/10W
R459	1-216-809-11	METAL CHIP	100	5%	1/10W
R460	1-216-809-11	METAL CHIP	100	5%	1/10W
R461	1-216-809-11	METAL CHIP	100	5%	1/10W
R463	1-216-809-11	METAL CHIP	100	5%	1/10W
R465	1-216-809-11	METAL CHIP	100	5%	1/10W
R468	1-216-809-11	METAL CHIP	100	5%	1/10W
R469	1-216-809-11	METAL CHIP	100	5%	1/10W
R472	1-216-809-11	METAL CHIP	100	5%	1/10W
R474	1-216-857-11	METAL CHIP	1M	5%	1/10W
R475	1-216-809-11	METAL CHIP	100	5%	1/10W
R482	1-216-809-11	METAL CHIP	100	5%	1/10W
R484	1-216-809-11	METAL CHIP	100	5%	1/10W
R489	1-216-864-11	SHORT CHIP	0		
R490	1-216-864-11	SHORT CHIP	0		
R491	1-216-864-11	SHORT CHIP	0		
R494	1-247-807-31	CARBON	100	5%	1/4W
R495	1-247-807-31	CARBON	100	5%	1/4W
R496	1-249-429-11	CARBON	10K	5%	1/4W
		< VARIABLE RESISTOR >			
RV101	1-241-768-11	RES, ADJ CERMET	220K		
RV201	1-241-768-11	RES, ADJ CERMET	220K		
		< RELAY >			
RY301	1-515-920-11	RELAY (24V)			
		< TRANSFORMER >			
T101	1-419-080-21	COIL			
T201	1-419-080-21	COIL			
T301	1-423-980-11	TRANSFORMER, BIAS OSCILLATION			
		< TERMINAL >			
TM301	1-536-708-81	TERMINAL BOARD, PUSH (4P) (SPEAKER IMPEDANCE USE 6-16Ω)			

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X301	1-760-252-12	VIBRATOR, CRYSTAL (32.768kHz)			
X302	1-781-107-21	VIBRATOR, CERAMIC (16MHz)			
**********					
	A-4750-228-A	PANEL (1) BOARD, COMPLETE			
		**********			
	4-249-151-01	HOLDER, FL TUBE			
	4-249-984-01	FILTER (FL TUBE)			
		< CAPACITOR >			
C804	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C805	1-126-964-11	ELECT	10uF	20%	50V
C806	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C807	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C808	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C809	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C810	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C811	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C820	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C821	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C822	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C823	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C824	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C825	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C826	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C827	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C828	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C829	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C830	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C831	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C832	1-126-964-11	ELECT	10uF	20%	50V
C833	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C834	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V
C835	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C836	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V
C837	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C838	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C839	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C840	1-126-382-11	ELECT	100uF	20%	16V
C841	1-126-796-11	ELECT	22uF	20%	50V
C842	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
		< CONNECTOR >			
CN801	1-568-838-11	CONNECTOR, FFC 21P			
		< DIODE >			
D802	8-719-063-91	LED SLR325DC-P-T32 (BAND, TUNER)			
D803	8-719-063-91	LED SLR325DC-P-T32 (◄ ► TAPE)			
D804	8-719-063-93	LED SLR325VC-N-T32 (I/⏻)			
D805	8-719-982-26	DIODE MTZJ-33B			
D806	8-719-109-85	DIODE RD5.1ESB2			
D810	6-500-522-01	DIODE 10EDB40-TA1B2			
		< FLUORESCENT INDICATOR TUBE >			
FL701	1-518-965-11	INDICATOR TUBE, FLUORESCENT			

Ref. No.	Part No.	Description			Remark
		< IC >			
IC801	8-759-643-83	IC uPD16315GB-3BS			
IC802	6-600-174-01	IC RPM7240-H4			
		< TRANSISTOR >			
Q801	8-729-038-67	TRANSISTOR	KRC102S		
Q802	8-729-038-67	TRANSISTOR	KRC102S		
Q803	8-729-038-67	TRANSISTOR	KRC102S		
Q804	8-729-038-67	TRANSISTOR	KRC102S		
Q805	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q806	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q807	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q808	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
		< RESISTOR >			
R801	1-216-813-11	METAL CHIP	220	5%	1/10W
R802	1-216-815-11	METAL CHIP	330	5%	1/10W
R803	1-216-817-11	METAL CHIP	470	5%	1/10W
R804	1-216-819-11	METAL CHIP	680	5%	1/10W
R805	1-216-821-11	METAL CHIP	1K	5%	1/10W
R806	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R807	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R811	1-216-813-11	METAL CHIP	220	5%	1/10W
R812	1-216-815-11	METAL CHIP	330	5%	1/10W
R813	1-216-817-11	METAL CHIP	470	5%	1/10W
R814	1-216-819-11	METAL CHIP	680	5%	1/10W
R815	1-216-821-11	METAL CHIP	1K	5%	1/10W
R816	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R817	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R818	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R819	1-216-833-11	METAL CHIP	10K	5%	1/10W
R830	1-216-806-11	METAL CHIP	56	5%	1/10W
R831	1-216-811-11	METAL CHIP	150	5%	1/10W
R832	1-216-809-11	METAL CHIP	100	5%	1/10W
R835	1-216-809-11	METAL CHIP	100	5%	1/10W
R841	1-216-809-11	METAL CHIP	100	5%	1/10W
R842	1-216-811-11	METAL CHIP	150	5%	1/10W
R845	1-216-864-11	SHORT CHIP	0		
R846	1-216-845-11	METAL CHIP	100K	5%	1/10W
R847	1-216-845-11	METAL CHIP	100K	5%	1/10W
R848	1-216-844-11	METAL CHIP	82K	5%	1/10W
R849	1-216-809-11	METAL CHIP	100	5%	1/10W
R850	1-216-809-11	METAL CHIP	100	5%	1/10W
R851	1-216-809-11	METAL CHIP	100	5%	1/10W
R852	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R853	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R854	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R855	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R856	1-249-393-11	CARBON	10	5%	1/4W
R857	1-216-845-11	METAL CHIP	100K	5%	1/10W
R858	1-216-833-11	METAL CHIP	10K	5%	1/10W
R859	1-216-809-11	METAL CHIP	100	5%	1/10W
R860	1-216-809-11	METAL CHIP	100	5%	1/10W
R861	1-216-864-11	SHORT CHIP	0		
R862	1-216-864-11	SHORT CHIP	0		

PANEL (1) PANEL (2) POWER

Ref. No.	Part No.	Description			Remark
		< SWITCH >			
S701	1-762-875-21	SWITCH, KEYBOARD (I/⏻)			
S702	1-762-875-21	SWITCH, KEYBOARD (◀◀)			
S703	1-762-875-21	SWITCH, KEYBOARD (▶▶)			
S704	1-762-875-21	SWITCH, KEYBOARD (◀ ▶ TAPE)			
S705	1-762-875-21	SWITCH, KEYBOARD (■ (TAPE))			
S706	1-762-875-21	SWITCH, KEYBOARD (● REC, PAUSE/START)			
S707	1-762-875-21	SWITCH, KEYBOARD (CD SYNCHRO)			
S708	1-762-875-21	SWITCH, KEYBOARD (DIRECTION)			
S709	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)			
S710	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)			
S711	1-762-875-21	SWITCH, KEYBOARD (FM MODE)			
S712	1-762-875-21	SWITCH, KEYBOARD (TUNER MEMORY)			
S713	1-762-875-21	SWITCH, KEYBOARD (TUNING –)			
S714	1-762-875-21	SWITCH, KEYBOARD (TUNING +)			
S715	1-762-875-21	SWITCH, KEYBOARD (BAND, TUNER)			
S716	1-762-875-21	SWITCH, KEYBOARD (TUNING MODE)			
S717	1-762-875-21	SWITCH, KEYBOARD (DSGX)			
S801	1-418-859-21	ENCODER, ROTARY (BASS)			
S802	1-418-859-21	ENCODER, ROTARY (TREBLE)			
S803	1-476-730-11	ENCODER, ROTARY (VOLUME)			
**********					
	A-4750-229-A	PANEL (2) BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C136	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V
C236	1-162-971-11	CERAMIC CHIP	0.001uF	10%	50V
		< LED >			
D801	8-719-063-91	LED SLR325DC-P-T32 (▶❚❚ CD)			
		< FERRITE BEAD >			
FB121	1-216-864-11	SHORT CHIP	0		
FB221	1-216-864-11	SHORT CHIP	0		
		< JACK >			
J321	1-764-106-21	JACK (PHONES)			
		< RESISTOR >			
R821	1-216-813-11	METAL CHIP	220	5%	1/10W
R822	1-216-815-11	METAL CHIP	330	5%	1/10W
R823	1-216-817-11	METAL CHIP	470	5%	1/10W
R824	1-216-819-11	METAL CHIP	680	5%	1/10W
R825	1-216-821-11	METAL CHIP	1K	5%	1/10W
R826	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R827	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R828	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
		< SWITCH >			
S718	1-762-875-21	SWITCH, KEYBOARD (PLAY MODE)			
S719	1-762-875-21	SWITCH, KEYBOARD (REPEAT)			
S720	1-762-875-21	SWITCH, KEYBOARD (ALBUM –)			
S721	1-762-875-21	SWITCH, KEYBOARD (ALBUM +)			
S722	1-762-875-21	SWITCH, KEYBOARD (⏮ ◀◀)			
S723	1-762-875-21	SWITCH, KEYBOARD (▶▶ ⏭)			
S724	1-762-875-21	SWITCH, KEYBOARD (▶❚❚ CD)			
S725	1-762-875-21	SWITCH, KEYBOARD (■ (CD))			
S726	1-762-875-21	SWITCH, KEYBOARD (⏏)			
**********					
	A-1052-488-A	POWER BOARD, COMPLETE (US)			
	A-1059-498-A	POWER BOARD, COMPLETE (HK, SP)			
	A-1059-548-A	POWER BOARD, COMPLETE (KR)			
	A-1059-564-A	POWER BOARD, COMPLETE (AUS)			
	A-1061-979-A	POWER BOARD, COMPLETE (AR)			
	A-4750-219-A	POWER BOARD, COMPLETE (AEP)			
		**********			
	1-533-233-31	FUSE HOLDER			
	4-812-134-11	RIVET (DIA. 3.5), NYLON			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			
		< CAPACITOR >			
C901	1-126-935-11	ELECT	470uF	20%	16V
C902	1-126-944-11	ELECT	3300uF	20%	25V
C903	1-126-935-11	ELECT	470uF	20%	16V
C904	1-126-935-11	ELECT	470uF	20%	16V
C905	1-126-944-11	ELECT	3300uF	20%	25V
C907	1-130-495-00	MYLAR	0.1uF	5%	50V
C909	1-130-495-00	MYLAR	0.1uF	5%	50V
C912	1-126-969-11	ELECT	220uF	20%	50V
C913	1-130-495-00	MYLAR	0.1uF	5%	50V
C914	1-130-495-00	MYLAR	0.1uF	5%	50V
C915	1-126-964-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
* CN901	1-564-527-11	PLUG, CONNECTOR 12P			
CN903	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
		< DIODE >			
D901	6-500-385-01	DIODE D3SBA20-4100 (AUS)			
D901	8-719-500-56	DIODE D3SBA20 (US, HK, SP, KR)			
D901	8-719-500-60	DIODE D5SBA20 (AEP, AR)			
D902	8-719-063-79	DIODE 1N4002B			
D903	8-719-063-79	DIODE 1N4002B			
D904	8-719-063-79	DIODE 1N4002B			
D905	8-719-063-79	DIODE 1N4002B			
D906	8-719-063-79	DIODE 1N4002B			
D907	8-719-063-79	DIODE 1N4002B			
D908	8-719-063-79	DIODE 1N4002B			
D909	8-719-063-79	DIODE 1N4002B			
D910	6-500-522-01	DIODE 10EDB40-TA1B2 (EXCEPT AUS)			
D910	6-500-522-11	DIODE 10EDB40-TA2B5 (AUS)			
D911	8-719-991-33	DIODE 1SS133T-77			
D912	8-719-991-33	DIODE 1SS133T-77			
D913	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC901	8-759-231-57	IC TA7810S			
IC902	8-759-071-48	IC TA7807S			
IC903	6-701-760-01	IC uPC3504AHF			

POWER

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R901	1-249-417-11	CARBON	1K	5%	1/4W
R902	1-249-417-11	CARBON	1K	5%	1/4W
⚠R903	1-219-121-11	FUSIBLE	0.22	5%	1/4W F
⚠R904	1-219-121-11	FUSIBLE	0.22	5%	1/4W F
⚠R905	1-202-973-61	FUSIBLE	3.3	5%	1/4W F
⚠R906	1-219-237-51	SOLID	3.3M	20%	1/2W (US)
R909	1-249-421-11	CARBON	2.2K	5%	1/4W
		< RELAY >			
⚠RY901	1-755-324-11	RELAY			
		< SWITCH >			
⚠S901	1-771-291-31	SWITCH, POWER (VOLTAGE SELECTOR)			(HK, SP)
**********					
		MISCELLANEOUS			
		**********			
108	1-796-351-41	MECHANISM, SIGNAL CASSETTE			(CMAL1Z234A)
204	1-500-386-11	FILTER, CLAMP (FERRITE CORE)			
⚠206	1-769-079-23	CORD, POWER (KR)			
⚠206	1-769-744-52	CORD, POWER (HK, SP, AEP)			
⚠206	1-775-790-12	CORD, POWER (AUS)			
⚠206	1-783-531-22	CORD, POWER (US)			
⚠206	1-829-387-11	CORD, POWER (AR)			
208	1-468-738-11	REGULATOR, SWITCHING			
209	1-693-625-11	TUNER (FM/AM) (US)			
209	1-693-626-11	TUNER (FM/AM) (AEP)			
209	1-693-628-11	TUNER (FM/AM) (HK, SP, AUS, AR)			
209	1-693-629-11	TUNER (FM/AM) (KR)			
462	1-452-925-21	MAGNET ASSY			
⚠657	8-820-244-11	OPTICAL PICK-UP KSM-215DCP/C2NP			
658	1-827-992-11	WIRE (FLAT TYPE) (16 CORE)			
⚠F901	1-533-451-12	FUSE, GLASS TUBE (DIA. 5) (3.15A/125V)			(US)
⚠F901	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15A/250V)			(HK, SP, KR, AUS)
⚠F901	1-533-471-12	FUSE, GLASS TUBE (DIA. 5) (T4A/250V)			(AEP, AR)
⚠F902	1-533-451-12	FUSE, GLASS TUBE (DIA. 5) (3.15A/125V)			(US)
⚠F902	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15A/250V)			(HK, SP, KR, AUS)
⚠F902	1-533-471-12	FUSE, GLASS TUBE (DIA. 5) (T4A/250V)			(AEP, AR)
⚠F903	1-533-467-12	FUSE, GLASS TUBE (DIA. 5) (T1.6A/250V)			(HK, SP)
M301	1-787-103-11	FAN, DC (US, AEP, AR)			
M701	X-2021-530-1	MOTOR (PULLEY) ASSY (LOADING)			
S101	1-771-853-11	SWITCH, DETECTION (LIMIT)			
⚠T901	1-443-197-11	TRANSFORMER, POWER (AEP, AR)			
⚠T901	1-443-204-11	TRANSFORMER, POWER (US)			
⚠T901	1-443-205-11	TRANSFORMER, POWER (HK, SP, KR, AUS)			
**********					

Ref. No.	Part No.	Description	Remark
		ACCESSORIES	
		**********	
	1-569-008-32	ADAPTOR, CONVERSION (SP)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2004.04	New

SS-CGPX6/CGPX7

SERVICE MANUAL

Ver 1.1 2004.05

US Model
Australian Model
SS-CGPX6
AEP Model
E Model
SS-CGPX6/CGPX7

Photo: SS-CGPX7

- SS-CGPX6 is the speaker system in CMT-GPX6 and CMT-GPX5 (AEP model).
- SS-CGPX7 is the speaker system in CMT-GPX7.

SPECIFICATIONS

SS-CGPX7

Speaker system	2-way, bass-reflex type
Speaker units	
Woofer:	13 cm dia., cone type
Tweeter:	4 cm dia., cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 163 × 261.5 × 259.5 mm
Mass	Approx. 3.0 kg net per speaker

SS-CGPX6

Speaker system	2-way, bass-reflex type
Speaker units	
Woofer:	12 cm dia., cone type
Tweeter:	4 cm dia., cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 160 × 261.5 × 229.5 mm
Mass	Approx. 2.6 kg net per speaker

Design and specifications are subject to change without notice.

PARTS LIST

Part No.	Description	Remark
A-4714-243-A	MAIN UNIT ASSY (SS-CGPX7)	
A-4715-214-A	MAIN UNIT ASSY (SS-CGPX6)	

SPEAKER SYSTEM

9-877-743-02
2004E05-1
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REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2004.04	New
1.1	2004.05	Addition AEP model to SS-CGPX6